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The Energy Information Administration (EIA) is undertaking a program to make the dates of its periodicals consistent and explicit. Beginning in January 1984, issues of all EIA periodicals will be dated according to the bulk of the data in them, NOT (as in the past) the date of publication. The data date will be displayed prominently on covers, title pages, and spines. The publication date will be less prominently displayed.

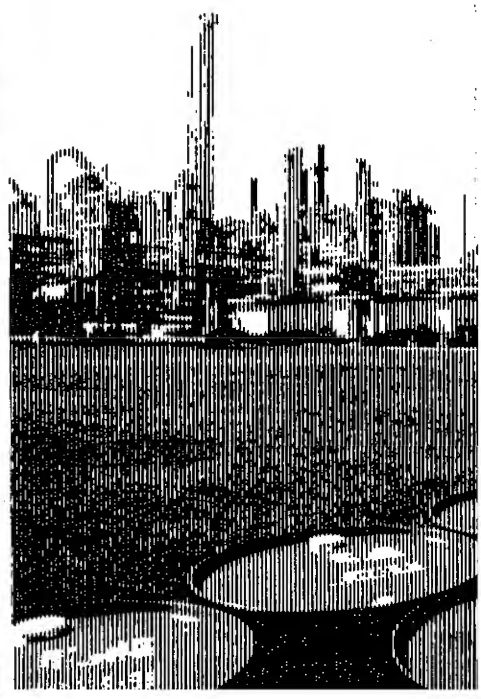
Some monthly periodicals will have to have more than one December issue (designated December 1983 [1], December 1983 [2], etc.). Once the bulk of the data in these periodicals is vintage January 1984, the periodical will be dated January 1984. In the case of the Monthly Energy Review, for example, there will be three "December 1983" issues; the January 1984 issue will be published in April. Other monthly periodicals will follow similar procedures.

Petroleum Supply Monthly

Energy Information Administration
Washington, D.C. 20585

December 1983 [2]

November 1983 data
published January 1984



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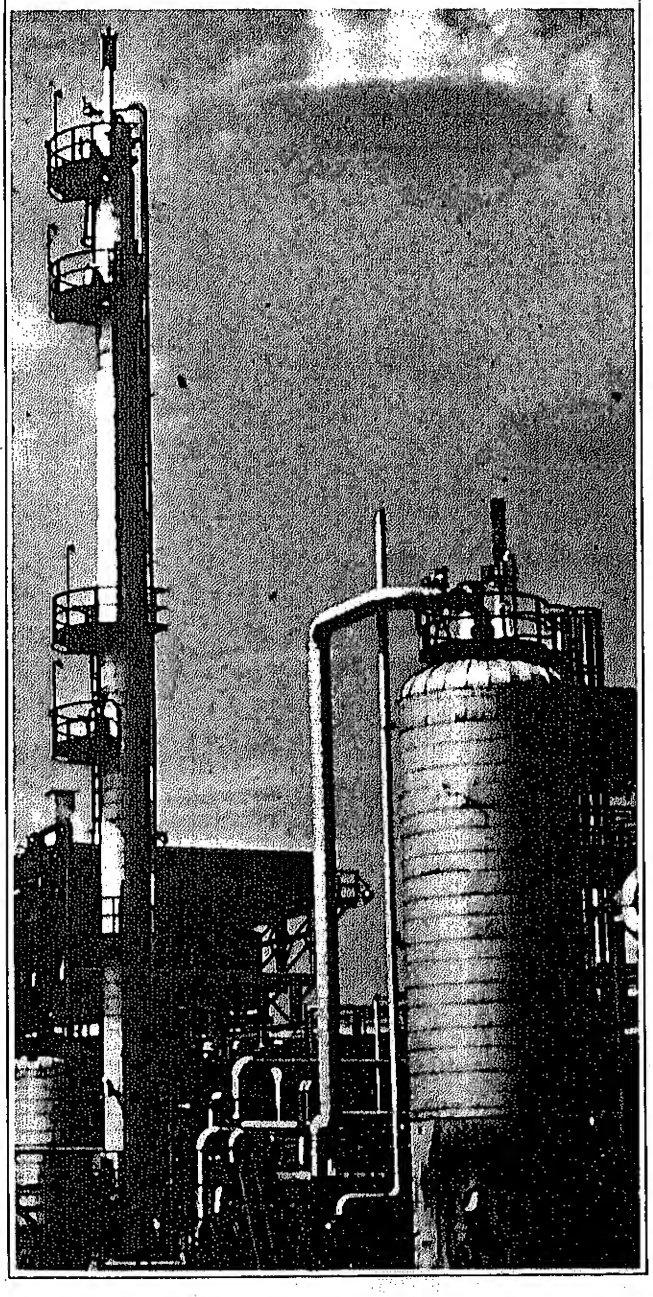
This Month in the PSM

This issue of the Petroleum Supply Monthly focuses on petroleum developments over the past year. "U.S. Petroleum Developments: 1983," beginning on page ix, summarizes changes in consumption, refinery operations, petroleum stocks, imports, exports, and prices. The article also includes information on crude oil production and drilling activity. A special "Update on Refinery Closings" appears on page xi, and a supplemental summary of developments related to the Strategic Petroleum Reserve appears on page xii. A third insert illustrating the downward trend in petroleum imports since 1979 is found on page xiii.



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Petroleum Focus

Petroleum Supply Summary

Average Volume for Period (Million Barrels Per Day)	December 1983	December 1982	December % Change	Cumulative January Through December 1983	Cumulative January Through December 1982	Cumulative January Through December % Change
Products Supplied						
Motor Gasoline	6.6	6.5	1.0	6.6	6.5	0.9
Distillate Fuel Oil	3.3	2.9	13.8	2.7	2.7	0.1
Residual Fuel Oil	1.4	1.6	– 13.1	1.4	1.7	– 19.1
Other Products	4.3	4.5	– 3.4	4.4	4.4	1.4
Total	15.6	15.5	0.6	15.1	15.3	– 1.3
Crude Inputs to Refineries	11.4	11.5	– 1.0	11.7	11.8	– 0.7
Production						
Crude Oil, Natural Gas Liquids, and Other[1]	10.3	10.3	0.2	10.3	10.3	0.3
Imports						
Crude Oil[2]	3.1	2.9	8.8	3.1	3.3	– 7.4
SPR	0.3	0.1	117.7	0.2	0.2	45.5
Products	1.5	1.6	– 3.8	1.7	1.6	2.6
Total	4.9	4.6	7.3	5.0	5.1	– 2.5
Exports						
Crude Oil	0.2	0.2	– 3.6	0.2	0.2	– 27.1
Products	0.5	0.7	– 25.9	0.6	0.6	– 1.4
Total	0.7	0.9	– 20.9	0.7	0.8	– 8.8
Stock Withdrawal						
Crude Oil[2]	(s)	0.3	—	(s)	(s)	—
Products	0.8	0.7	—	0.1	0.3	—
Stocks at End of Period (Million Barrels)						
Crude Oil						
SPR	378	294	28.8			
Other	349	350	NM			
Total	727	644	NM			
Products						
Motor Gasoline[3]	228	235	NM			
Distillate Fuel Oil	144	179	NM			
Residual Fuel Oil	48	66	NM			
Other	331	306	NM			
Total	751	786	NM			
Total Crude Oil and Products	1,479	1,430	NM			

1 Includes alcohol and other hydrocarbon liquids.
2 Excludes Strategic Petroleum Reserve (SPR).
3 Including blending components.
NM = Not meaningful due to new stock basis.
(s) = Less than 0.05 million barrels per day.
NOTE: Percent changes are based on unrounded values. December 1983 data are estimates based on weekly data, except for exports and NGL production estimates which are November 1983 monthly values. Totals may not be equal to sum of components due to independent rounding.
Source: Energy Information Administration, Petroleum Supply Monthly, January 1984.

U.S. Petroleum Developments: 1983

Petroleum developments in 1983 continued to be characterized by declines in many areas, with modest upturns in others:

- Total 1983 petroleum consumption was below the 1982 level despite an upturn in consumption in the second half of 1983.
- Refinery capacity continued to decline, which in turn was reflected in higher utilization rates.
- Net imports of crude oil continued to fall.
- Crude oil acquisition costs and refined product retail prices fell.
- The number of rotary rigs in operation reversed its steep downward trend.
- Motor gasoline consumption increased slightly, reversing last year's decline.

Petroleum Consumption

During 1983, petroleum consumption in the United States (measured as products supplied for domestic use) declined for the fifth consecutive year despite an upturn in this series in the second half of 1983 (see Figure 1). Consumption averaged 15.1 million barrels per day, about 1 percent below consumption in 1982 and 20 percent less than in 1978, the peak demand year. During the second half of 1983, however, petroleum consumption averaged 15.3 million barrels per day compared with 14.9 million barrels per day in the first half of the year. Continued price decreases, as well as a strengthening of the economy starting in the third quarter of 1983, contributed to the modest upturn in consumption in the second half of the year.

Despite overall declines in consumption, petroleum remained the principal source of energy in the United States. About 43 percent of total U.S. energy consumption was accounted for by petroleum, nearly the same as in 1982 (see Figure 2). Petroleum's share of the energy market has declined, however, since 1978, when it reached a peak of 49 percent. This continued decline is the result of conservation efforts and fuel switching that stemmed from the rapid escalation of petroleum prices during the 1970's.

Figure 1. Petroleum Summary

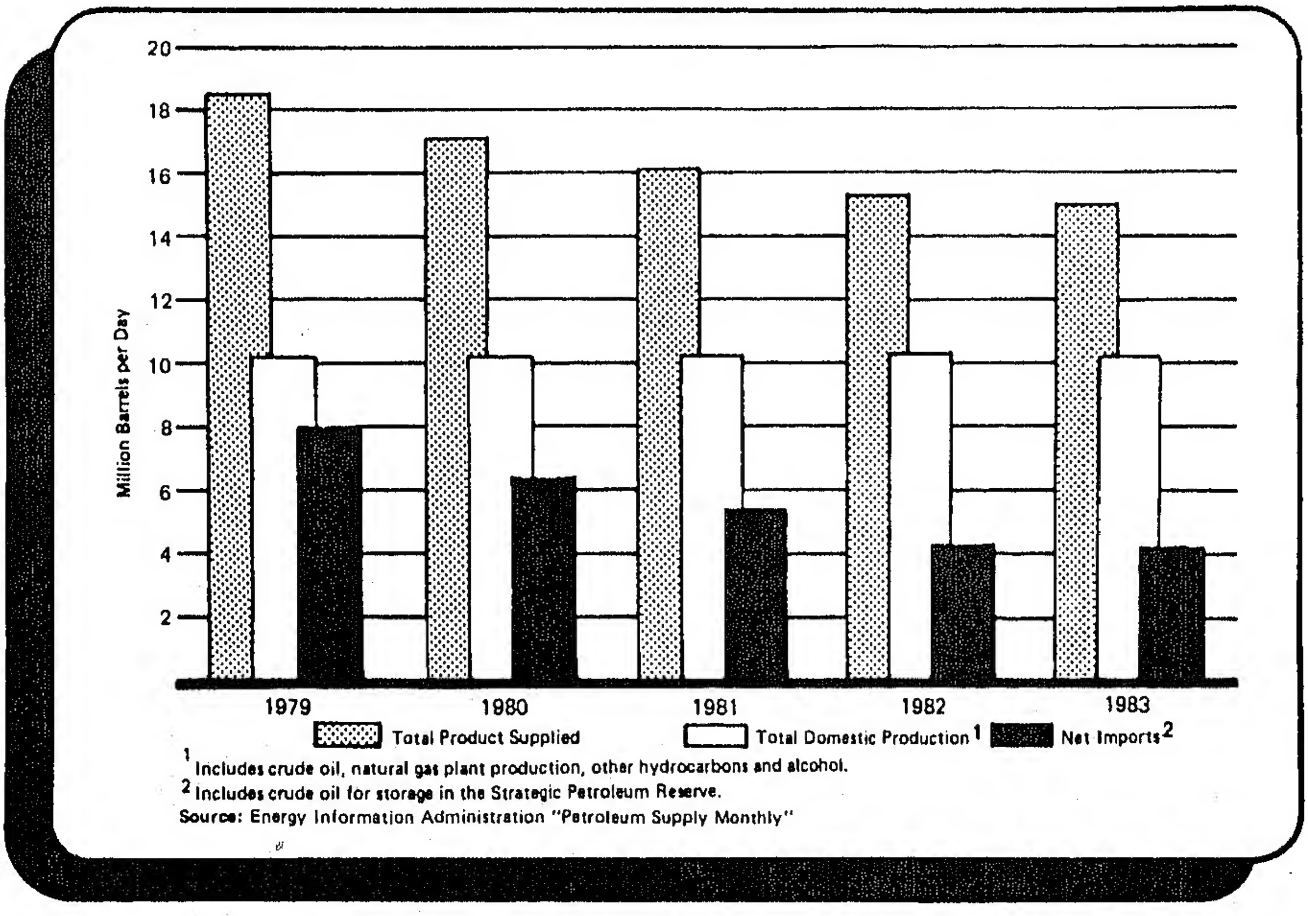
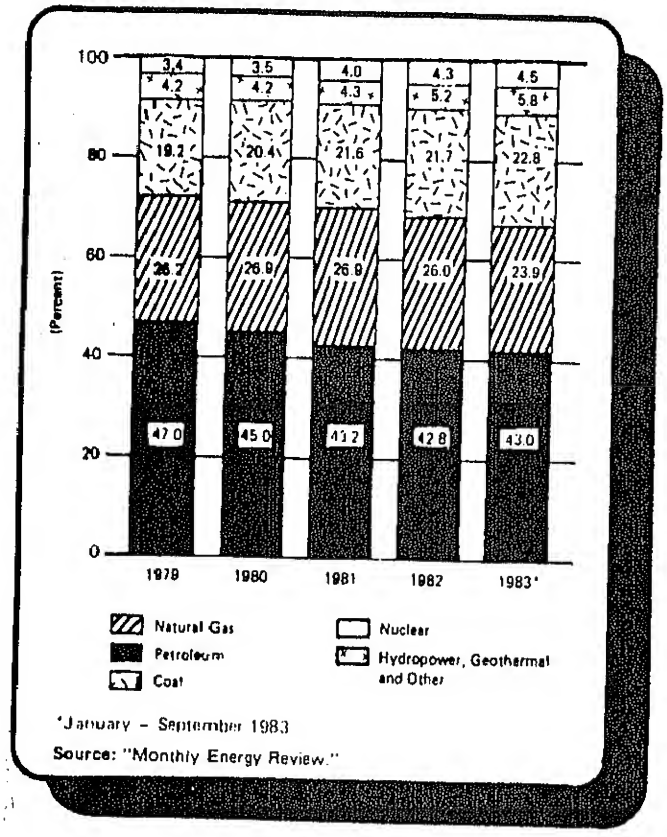


Figure 2. Consumption of Energy by Type



Finished motor gasoline supplied for domestic use increased slightly during 1983, averaging 6.6 million barrels per day compared with 6.5 million barrels per day in 1982 (see page 11). Consumption showed substantial gains beginning in June, averaging 6.7 million barrels for the period June through December. Despite seasonal variations and the effects of higher gasoline taxes, gasoline prices continued to subside in 1983 from their 1981 highs. While lower prices were evident in both 1982 and 1983, consumption did not begin to increase until 1983 when the economy began to improve.

Distillate fuel oil consumption, which averaged 2.7 million barrels per day in 1983, showed almost no change over the 1982 average (see page 13). However, consumption during the second half of 1983 was about 9 percent higher than in the second half of 1982. The increase was associated with a strengthening of the economy.

Consumption of residual fuel oil continued the steady decline that started in 1978 when consumption averaged 3.0 million barrels per day. In 1983, residual fuel oil consumption averaged 1.4 million barrels per day, about 19 percent below the 1982 average (see page 15). Following the mild winter of 1982-1983, consumption remained considerably below historical levels, despite signs of economic recovery in the second half of 1983.

Fuel switching by electric utilities, the largest consumers of residual fuel oil, contributed to the decline in residual fuel oil consumption. Although the cost of generating electricity for utilities burning residual fuel oil declined in 1982 and the first half of 1983, it was still significantly higher than the cost of burning coal and natural gas.[1] [2]

Refinery Operations

The daily average total operable crude oil distillation capacity[3] of petroleum refineries in the United States decreased by about 500 thousand barrels during 1983. This was the result of refinery closures and partial shutdowns as refiners continued to eliminate excess capacity and uneconomic facilities (see insert, next page). Many refiners also upgraded their downstream facilities in order to improve their ability to produce lighter products such as gasoline. Refinery utilization rates, which were persistently low through 1981 and 1982, increased throughout most of 1983. During September 1983, refiners operated at over 76 percent capacity, the highest level of utilization observed since June 1980. This was the result of increased inputs and significant refinery closings reported for that month. Crude oil inputs to refineries averaged 11.7 million barrels per day during the year, less than 1 percent below the 1982 average (see page 7).

Petroleum Stocks

Total petroleum stocks, excluding the Strategic Petroleum Reserve (SPR), decreased by about 67 million barrels during 1983, compared to the 1982 decline of 117 million barrels. About 66 million barrels of the 1983, decrease was in inventories of refined products. Total crude oil stocks (excluding SPR) declined slightly from 350 million barrels at the end of 1982 to 349 million barrels at the end of 1983 (see page 7). Crude oil stocks held in the Strategic Petroleum Reserve exceeded privately held crude oil stocks for the first time in the 7 years of SPR's existence (see insert, page xii).

At the end of 1983, stock levels of most major products were below the levels at the end of 1982. Distillate fuel oil inventories at 144 million barrels, were 23 percent below the level at the end of 1982; residual fuel oil inventories, at 48 million barrels, were 29 percent below the level at the end of 1982; motor gasoline inventories at 228 million barrels, were about 7 percent below the level at the end of 1982 (see pages 11-15). Although stocks have continued to decrease, supplies of petroleum products were adequate to meet demand given excess refining capacity, secure crude oil supplies and the availability of product imports.

[1] Energy Information Administration, *Cost and Quality of Fuels for Electric Utility Plants*, DOE/EIA-0191(82) (Washington, D.C.: 1983), pp. 10, 14, 16.
[2] Energy Information Administration, *Electric Power Quarterly*, DOE/EIA-0397(83/1Q and 2Q) (Washington, D.C.: 1983), pp. 10, 20.
[3] See Glossary, this issue, p. 62.

The continued decline in stock levels reflects structural changes in the petroleum industry. These changes have been in response to declining demand levels and product prices, increased raw material and operating costs, and other factors which have caused an increase in the cost of storing products.

As a result of industry changes in inventory management, the National Petroleum Council (NPC), at the request of the Secretary of Energy, conducted a study and developed new estimates for Minimum Operating Inventory (MOI) levels for crude oil and major fuel products. The MOI is defined as the inventory level below which operating problems and shortages would begin to appear in a defined distribution system. The NPC revised the estimated MOI level for crude oil downward, from 290 million barrels to 285 million barrels. The motor gasoline MOI was also revised downward from 210 million barrels to 200 million barrels. The MOI for distillate fuel oil was reduced from 125 million barrels to 105 million barrels. The residual fuel oil MOI was lowered from 60 million barrels to 40 million barrels. A detailed discussion of the NPC study and changes to the MOI's is provided in the feature article of the December 1983 issue of the *Petroleum Supply Monthly*.

Update on Refinery Closings

As reported in the 1982 "Petroleum Supply Annual," there were 258 operable refineries in the United States on January 1, 1983. Since that time, the 11 refineries listed below, with a combined operable crude distillation capacity of more than 500,000 barrels per calendar day and total downstream capacity of more than 600,000 barrels per stream day, have been shut down. These data reflect closings through October 31, 1983. The Energy Information Administration anticipates additional refinery closings by the end of 1983, resulting in the further loss of nearly 75,000 barrels per calendar day of crude distillation capacity and approximately 70,000 barrels per stream day of downstream capacity. New construction and modifications at existing facilities, and resumed operations at refineries previously shut down, are expected to only partially offset the effects of these closings.

Refinery Closings Since January 1, 1983

Refiner	Location	Crude Oil Distillation Capacity	Downstream Capacity	Years in Operation
Anchor Refining Co., Inc.	McKittrick, California	9,000	7,000	5
Arizona Fuels Corp.	Fredonia, Arizona	6,000	---	11
Demenno–Kerdoon	Compton, California	10,000	2,000	6
Erickson Refining Corp.	Pt. Neches, Texas	30,000	---	4
GHR Energy Corp.	Good Hope, Louisiana	300,000	433,000	15
Independent Refining Corp.	Winnie, Texas	50,000	63,000	23
Marion Corp.	Theodore, Alabama	25,000	14,500	15
McTan Refining Corp.	St. James, Louisiana	19,300	---	6
Mobil Oil Corp.	Augusta, Kansas	50,000	83,900	25+
Shore, Inc.	Kilgore, Texas	550	---	3
Silver Eagle Oil, Inc.	La Barge, Wyoming	1,500	---	9
Total		501,350	603,400	

Source: Energy Information Administration

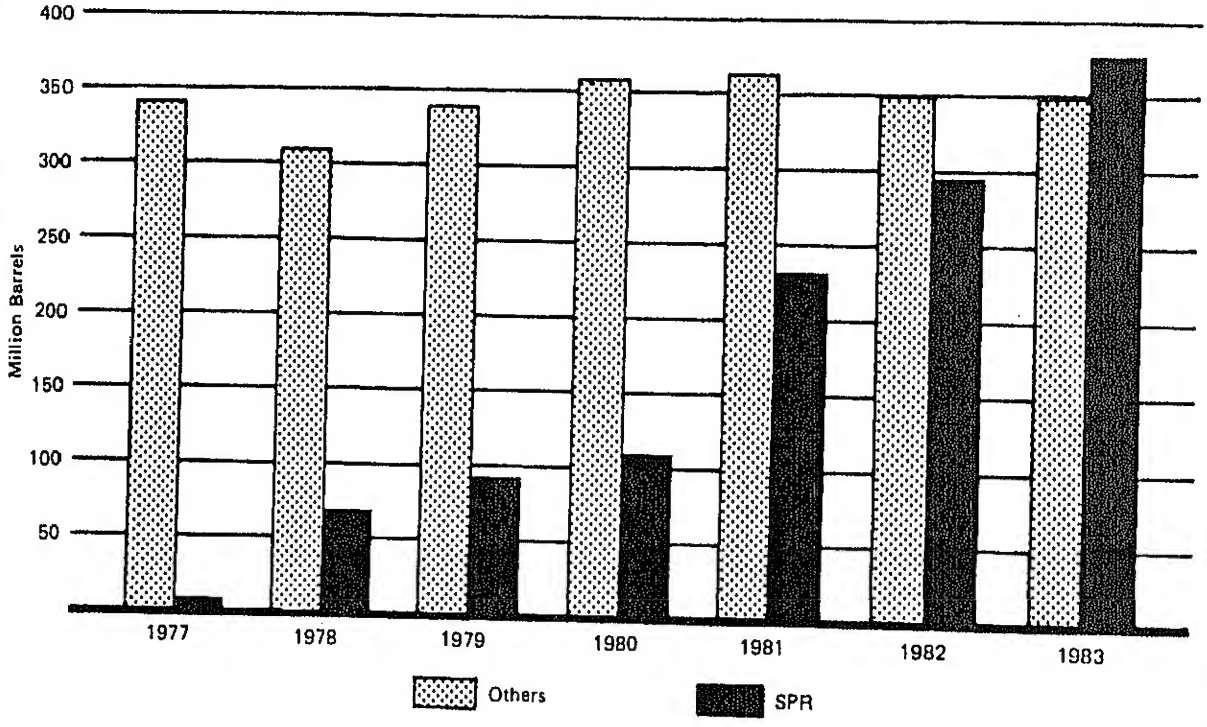
Strategic Petroleum Reserve

Two milestones occurred in the Strategic Petroleum Reserve (SPR) during the last quarter of 1983. In September SPR crude oil ending stocks reached 361 million barrels, exceeding privately held crude stocks for the first time in the 7 years of SPR's existence. The second event occurred in December when the SPR stocks reached 375 million barrels, the halfway mark of the 750 million barrel goal.

In response to the Arab oil embargo during 1973–1974, Congress passed the Energy Policy and Conservation Act (P.L. 94–163). Included in this legislation was the creation of the Strategic Petroleum Reserve program. With this Act, Congress required a reserve of up to one billion barrels of crude oil and/or petroleum products to be set aside to reduce the impact of any supply disruptions caused by international discords. The reserves can be withdrawn only after the President has determined such an action is necessary.

Currently the drawdown and distribution capability for the SPR is 1.7 million barrels per day. The plans call for an ultimate drawdown and distribution capability of up to 4.5 million barrels per day.

Year–End Stocks of Crude Oil in the United States



Source: Energy Information Administration, "Petroleum Supply Monthly".

Imports

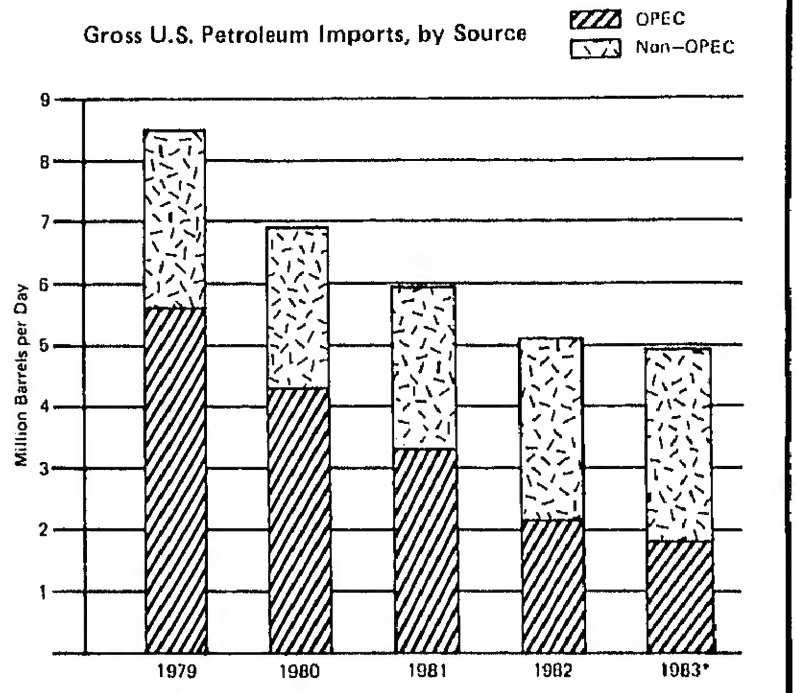
The downward trend in imports continued during 1983 as net imports (gross imports minus exports) of crude oil and petroleum products fell to an average of 4.2 million barrels per day, 2 percent below the average for 1982. During 1982, net imports averaged 20 percent below the 1981 level. This trend reflects the declining demand for petroleum products in the United States as well as the effort to reduce U.S. dependence on imports. The reduced dependence is most evident in the significant decline in the level of imports from members of the Organization of Petroleum Exporting Countries (OPEC) over the last four years. In 1983, 36 percent of U.S. petroleum imports came from OPEC nations, down from 67 percent in 1979 (see insert, page xiii).

Net crude oil imports declined for the fourth straight year, averaging 3.1 million barrels per day, 3 percent below the 1982 average. Net imports of petroleum products averaged 1.1 million barrels per day in 1983, exhibiting little change from 1982. Although imports of motor gasoline and distillate fuel oil increased significantly, this was partially offset by a decrease in residual fuel oil imports. Residual fuel oil imports decreased from 567,000 barrels per day in 1982 to 494,000 barrels per day in 1983. Motor gasoline imports increased by 37 percent, from 177,000 barrels per day to 242,000 barrels per day, and imports of distillate fuel oil increased fivefold, from 20,000 barrels per day to 100,000 barrels per day. (see pages 11-15).

U.S. Dependence on Petroleum Imports Declines

U.S. imports of petroleum have declined steadily since 1979, reducing U.S. dependence on foreign crude oil and petroleum products. At the same time, there has been a dramatic shift in the sources of U.S. petroleum imports away from members of the Organization of Petroleum Exporting Countries (OPEC) countries. In 1983, 36 percent of U.S. petroleum imports were from OPEC sources, compared with 42 percent in 1982, 55 percent in 1981, 62 percent in 1980, and 67 percent in 1979.

Gross U.S. Petroleum Imports, by Source



*January–September.

Source: Energy Information Administration "Petroleum Supply Monthly"

Exports

Petroleum product exports during 1983 averaged 578,000 barrels per day, representing a slight decline from the 1982 level of 579,000 barrels per day. During the second half of 1983, exports exhibited a substantial downturn, averaging approximately 200,000 barrels per day below the first half of 1983. Although exports of distillate fuel oil and residual fuel oil showed slight decreases for the year, the increases in exports of petroleum coke and liquefied petroleum gases partially offset these decreases.

Production

Domestic production of crude oil during 1983 was at its highest level since 1978, averaging 8.7 million barrels per day compared with 8.6 million barrels per day in 1982. Natural gas plant liquids production averaged 1.6 million barrels per day in 1983 about the same as in 1982.

Drilling activity in the United States during 1983 reversed the steep downward trend that began in the early months of 1982. The average number of rigs operating in December 1983 was 2,780 compared with 2,696 in December 1982.[4] Well completions in the United States were down in 1983, however. The total number of wells completed during 1983 decreased 11 percent, from 85,802 in 1982 to 76,321 in 1983.[5]

Prices

Petroleum prices fell during 1983, for the second straight year, reflecting price decreases for both domestic and imported crude oil. The refiner acquisition cost of domestic crude oil averaged $28.74 per barrel in November 1983, compared with $31.57 per barrel a year earlier. The refiner acquisition cost of imported crude oil also decreased, averaging $28.89 per barrel in November 1983 compared to $33.09 per barrel in November 1982.[6]

The average retail price of motor gasoline was below 1982 levels throughout most of 1983. In November, motor gasoline prices averaged $1.22 per gallon, 4 percent below the November average in 1982 and 10 percent lower than the average in November 1981. Retail prices of residential heating oil followed a similar pattern in 1983, dropping from a high of $1.15 per gallon in January to $1.06 per gallon in September.[7]

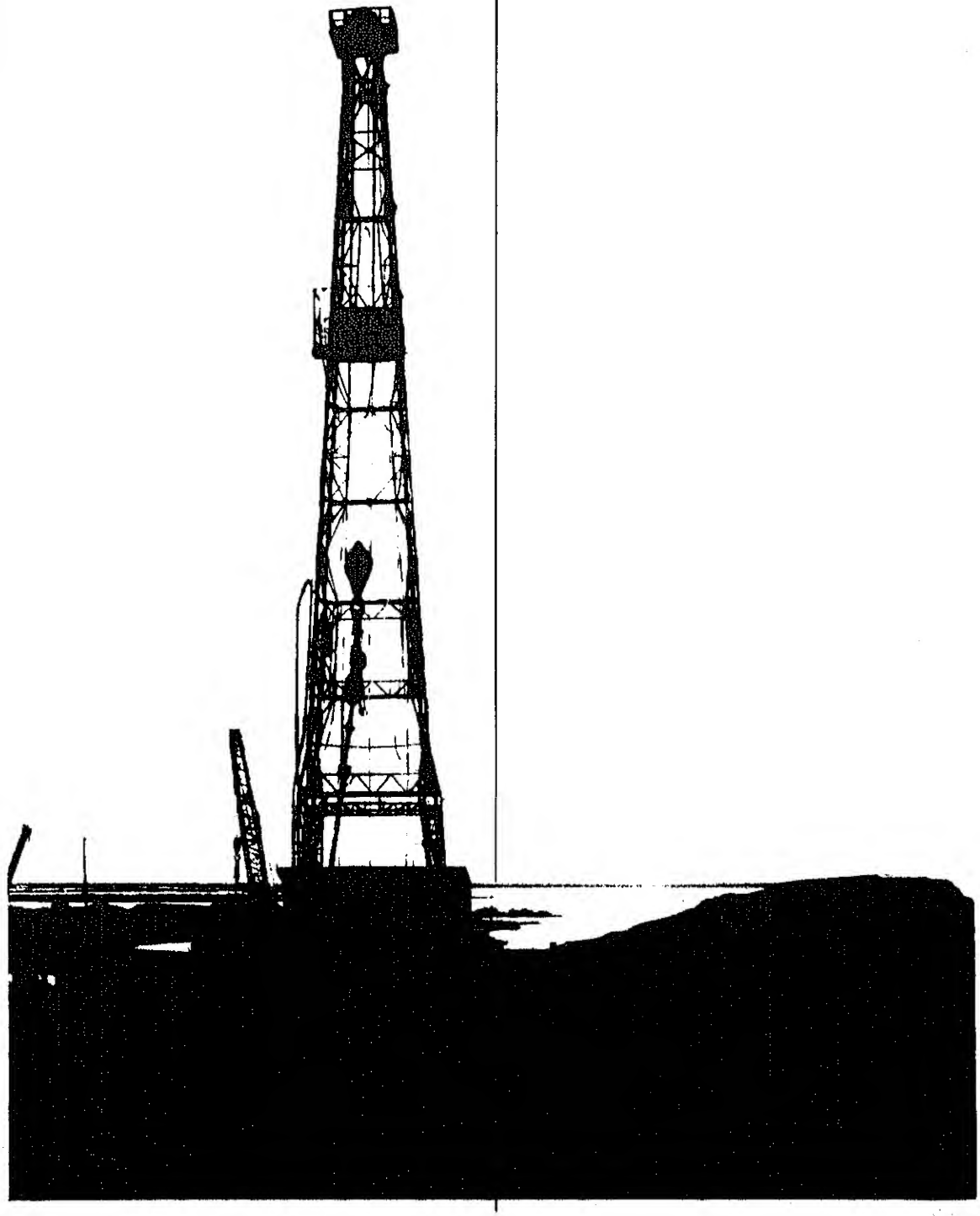
[4]Average of weekly data reported for the period by Hughes Tool Company, *Rotary Rigs Running-By State*, (Houston, Texas: November 1982 - December 1983).

[5]American Petroleum Institute, *Report on Drilling Activity in the United States*, (Washington, D.C.: January 1982 - December 1983).

[6]Energy Information Administration, *Weekly Petroleum Status Report*, DOE/EIA-0208 (84/03) (Washington, D.C. January 19, 1984), p. 17.

[7]*Weekly Petroleum Status Report*, p. 17.

Summary Statistics



Crude Oil[1] and Petroleum Products Overview

	Field Production			Stock Withdrawal[2]			Ending Stocks[3]
	Total Domestic[4]	Crude Oil	Natural Gas Plant Production	Crude Oil[5]	Petroleum Products	Petroleum Products Supplied	Crude Oil[5] and Petroleum Products
	Thousand Barrels per Day						Million Barrels
1973 AVERAGE	10,975	9,208	1,738	11	-146	17,308	1,008
1974 AVERAGE	10,498	8,774	1,688	-62	-117	16,653	[8] 1,074
1975 AVERAGE	10,045	8,375	1,633	[8] -17	[8] -145	16,322	1,133
1976 AVERAGE	9,774	8,132	1,603	-39	96	17,461	1,112
1977 AVERAGE	9,913	8,245	1,618	-170	-378	18,431	1,312
1978 AVERAGE	10,328	8,707	1,567	-78	172	18,847	1,278
1979 AVERAGE	10,179	8,552	1,584	-148	-25	18,513	1,341
1980 AVERAGE	10,214	8,597	1,573	-98	-42	17,056	[8] 1,392
1981 January	10,231	8,540	1,652	[8] 50	[8] 1,159	18,430	1,388
February	10,294	8,604	1,653	-278	250	16,989	1,389
March	10,272	8,613	1,624	-632	224	15,907	1,401
April	10,195	8,557	1,599	-595	148	15,350	1,415
May	10,160	8,501	1,593	-391	-374	15,353	1,438
June	10,287	8,629	1,594	-135	406	16,095	1,430
July	10,098	8,500	1,548	-360	91	15,682	1,439
August	10,243	8,583	1,614	397	-999	15,263	1,457
September	10,281	8,604	1,612	-285	-341	15,655	1,476
October	10,225	8,563	1,598	-760	477	15,822	1,485
November	10,269	8,586	1,630	-325	-233	15,593	1,501
December	10,220	8,585	1,590	-170	745	16,596	1,484
AVERAGE	10,230	8,572	1,609	-290	130	16,058	
1982 January	10,128	8,509	1,578	-401	1,298	16,124	1,456
February	10,312	8,702	1,563	-242	1,230	16,001	1,428
March	10,284	8,667	1,572	121	1,047	15,560	1,392
April	10,188	8,591	1,542	-37	1,583	16,046	1,346
May	10,244	8,683	1,518	29	-66	14,847	1,347
June	10,212	8,646	1,511	40	-489	14,998	1,360
July	10,229	8,658	1,513	-147	-926	14,821	1,393
August	10,215	8,634	1,524	-440	-44	14,839	1,408
September	10,279	8,701	1,518	263	-447	15,022	1,414
October	10,299	8,701	1,530	-548	-47	14,859	1,432
November	10,359	8,697	1,609	-398	-361	15,009	1,455
December	10,276	8,598	1,628	128	688	15,487	[8] 1,430
AVERAGE	10,252	8,649	1,550	-136	283	15,296	
1983 January	10,356	8,634	1,668	-567	[8] 865	14,765	1,453
February	10,298	8,660	1,585	-382	1,128	14,772	1,432
March	10,259	8,677	1,544	56	1,765	15,484	1,375
April	10,229	8,686	1,502	-438	431	14,779	1,376
May	10,231	8,682	1,483	68	-759	14,250	1,397
June	10,262	8,676	1,514	-163	-242	15,281	1,409
July	10,237	8,647	1,536	118	-922	14,913	1,434
August	10,257	8,653	1,561	-781	-289	15,366	1,467
September	10,323	8,666	1,598	-191	-634	15,396	1,492
October	10,317	8,654	1,604	-180	-456	14,947	1,512
November*	10,310	8,624	1,636	R 182	R -128	R 15,533	R 1,510
December**	NA	8,612	NA	*-233*	*838*	*15,583*	*1,479*
AVERAGE	NA	8,656	NA	-209	128	15,090	

1 Includes lease condensate.
2 A negative number indicates an increase in stocks and a positive number indicates a decrease.
3 Stocks are totals as of end of period.
4 Includes crude oil, natural gas plant production, other hydrocarbons and alcohol.
5 Includes stocks located in the Strategic Petroleum Reserve.
6 Includes crude oil for storage in the Strategic Petroleum Reserve.
7 Net Imports = Imports minus Exports.
8 In January 1975, 1981, and 1983, numerous respondents were added to surveys affecting stocks reported and stock withdrawal calculations. See Explanatory Note 10.

Footnotes continued on following page.

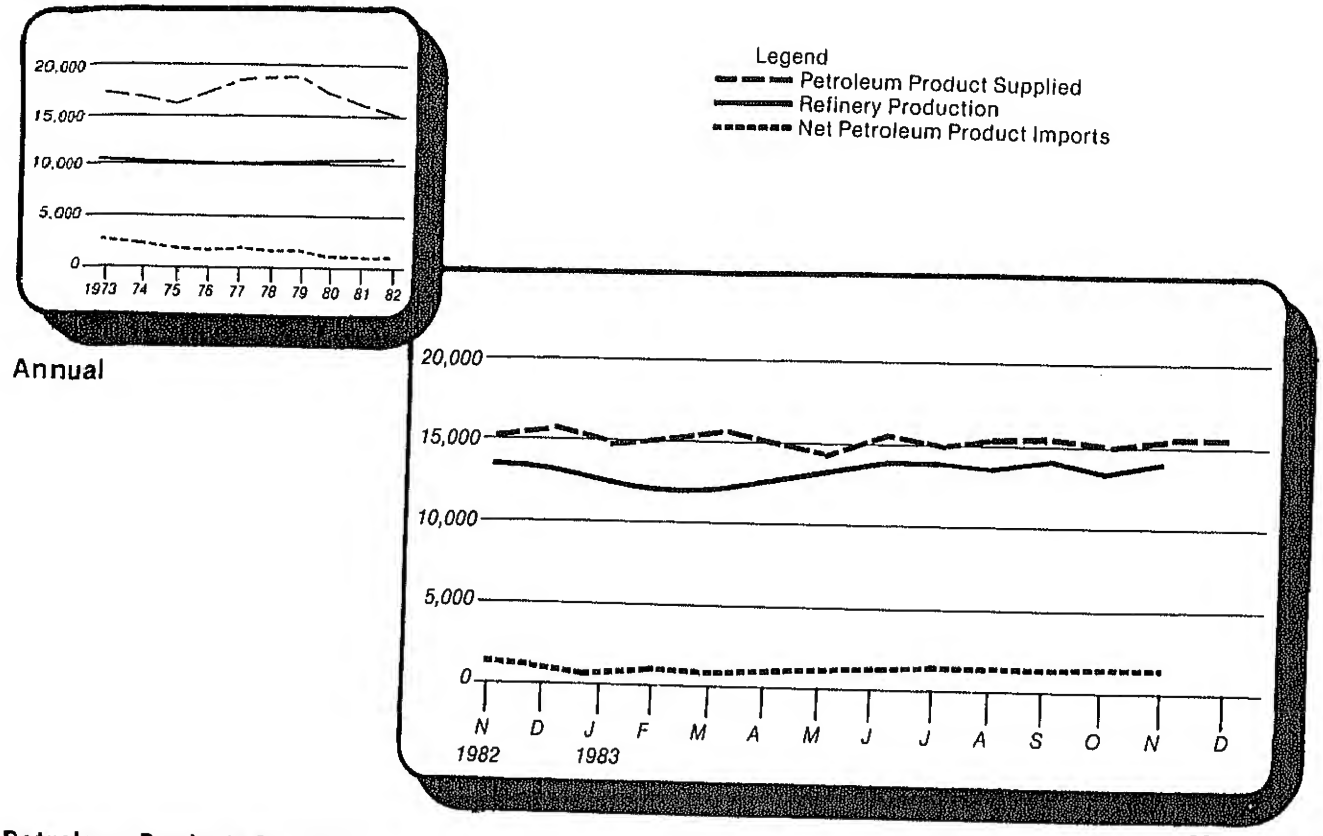
Crude Oil[1] and Petroleum Products Overview (continued)

	Imports			Exports			
	Total	Crude Oil[6]	Petroleum Products	Total	Crude Oil	Petroleum Products	Net[7] Imports
	Thousand Barrels per Day						
1973 AVERAGE	**6,256**	**3,244**	**3,012**	**231**	**2**	**229**	**6,025**
1974 AVERAGE	**6,112**	**3,477**	**2,635**	**221**	**3**	**218**	**5,892**
1975 AVERAGE	**6,056**	**4,105**	**1,951**	**209**	**6**	**204**	**5,846**
1976 AVERAGE	**7,313**	**5,287**	**2,026**	**223**	**8**	**215**	**7,090**
1977 AVERAGE	**8,807**	**6,615**	**2,193**	**243**	**50**	**193**	**8,565**
1978 AVERAGE	**8,363**	**6,356**	**2,008**	**362**	**158**	**204**	**8,002**
1979 AVERAGE	**8,456**	**6,519**	**1,937**	**472**	**235**	**237**	**7,984**
1980 AVERAGE	**6,909**	**5,263**	**1,646**	**544**	**287**	**258**	**6,365**
1981 January	6,827	4,932	1,895	558	339	219	6,270
February	6,772	4,873	1,899	569	198	371	6,203
March	6,028	4,521	1,507	586	210	376	5,442
April	5,668	4,338	1,330	570	198	372	5,098
May	5,775	4,287	1,489	595	312	283	5,180
June	5,435	4,061	1,375	420	123	297	5,015
July	5,816	4,296	1,521	571	257	314	5,245
August	5,767	4,179	1,588	644	204	440	5,123
September	6,365	4,740	1,624	519	194	325	5,845
October	5,959	4,380	1,579	738	226	512	5,221
November	5,741	4,046	1,695	701	278	423	5,041
December	5,843	4,137	1,706	656	189	467	5,187
AVERAGE	**5,996**	**4,396**	**1,599**	**595**	**228**	**367**	**5,401**
1982 January	5,332	3,693	1,639	829	238	591	4,503
February	4,807	2,990	1,817	804	304	499	4,003
March	4,484	2,874	1,610	882	321	561	3,602
April	4,378	2,849	1,529	786	174	611	3,593
May	4,811	3,309	1,503	803	262	542	4,008
June	5,327	3,836	1,491	703	94	609	4,624
July	5,890	4,248	1,642	741	229	512	5,149
August	5,244	3,851	1,392	858	304	554	4,386
September	5,414	3,636	1,778	791	184	606	4,624
October	5,306	3,670	1,636	932	270	662	4,374
November	5,744	3,862	1,882	786	262	524	4,958
December	4,606	3,000	1,605	860	193	667	3,746
AVERAGE	**5,113**	**3,488**	**1,625**	**815**	**236**	**579**	**4,298**
1983 January	4,372	2,938	1,434	973	117	856	3,399
February	3,691	2,268	1,423	865	262	603	2,825
March	3,629	2,232	1,398	801	174	627	2,829
April	4,744	3,154	1,590	809	88	721	3,935
May	4,898	3,234	1,664	848	280	568	4,049
June	5,218	3,502	1,716	774	144	630	4,443
July	5,690	3,868	1,822	571	145	426	5,119
August	6,036	4,174	1,863	663	172	491	5,373
September	6,088	4,221	1,867	684	177	507	5,403
October	5,256	3,446	1,810	576	140	436	4,680
November*	R 5,168	R 3,312	R 1,856	679	186	494	4,489
December**	*4,944*	*3,400*	*1,544*	NA	NA	NA	NA
AVERAGE	**4,985**	**3,318**	**1,667**	**NA**	**NA**	**NA**	**NA**

Footnotes continued.
* See Explanatory Note 9.1.
** Italics denote estimates based upon preliminary data. See Explanatory Note 8.
R = Revised data. NA = Not available.
Note: Geographic coverage is the 50 States and the District of Columbia.
Totals may not equal sum of components due to independent rounding.
Sources: See the last page of this section.

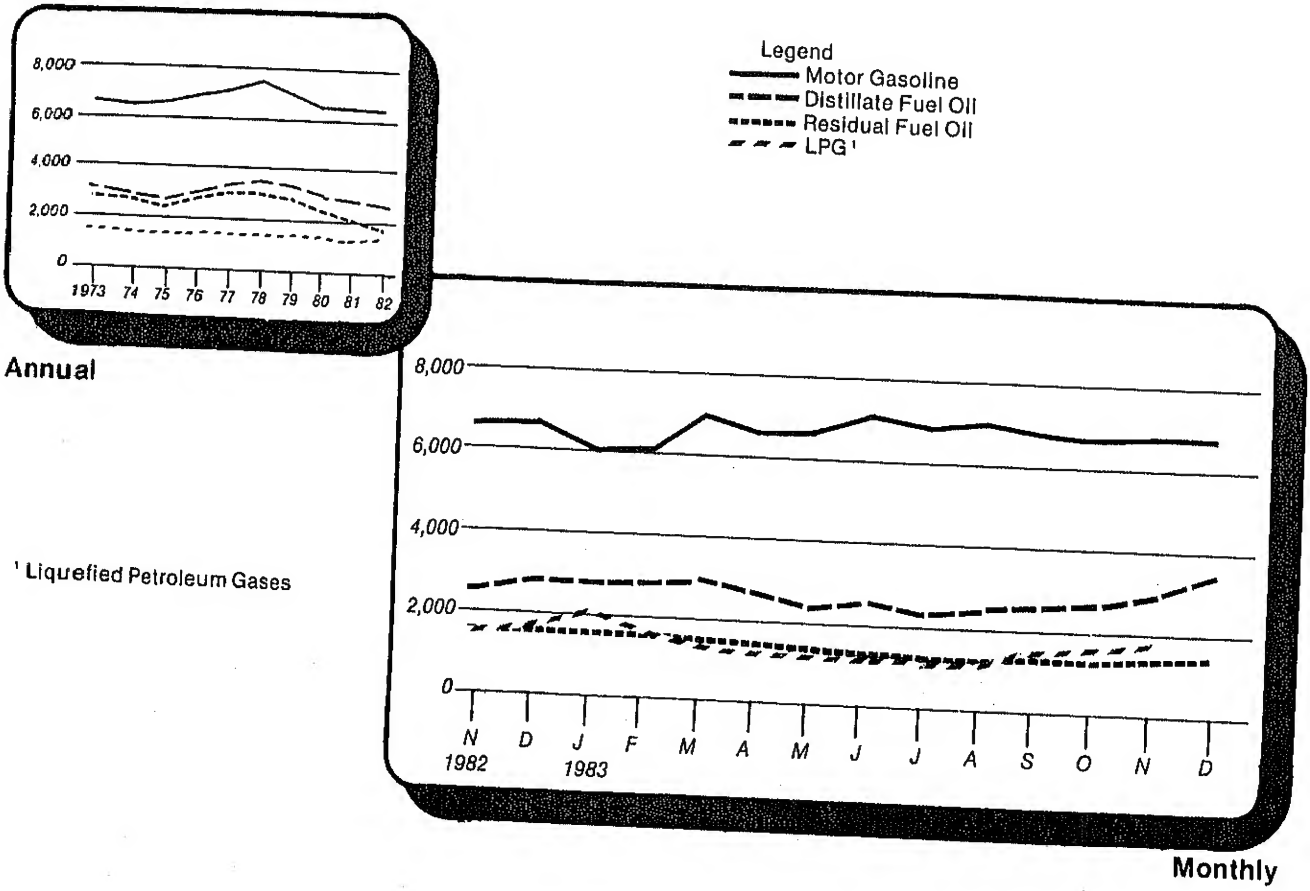
Petroleum Overview

(Thousand Barrels Per Day)



Petroleum Products Supplied

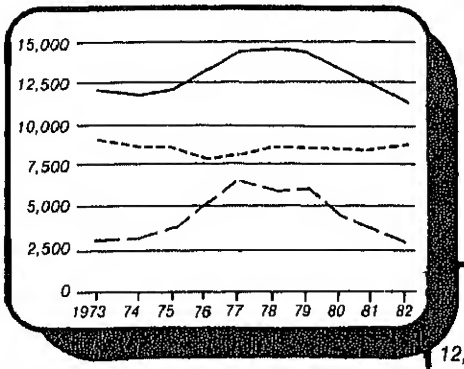
(Thousand Barrels Per Day)



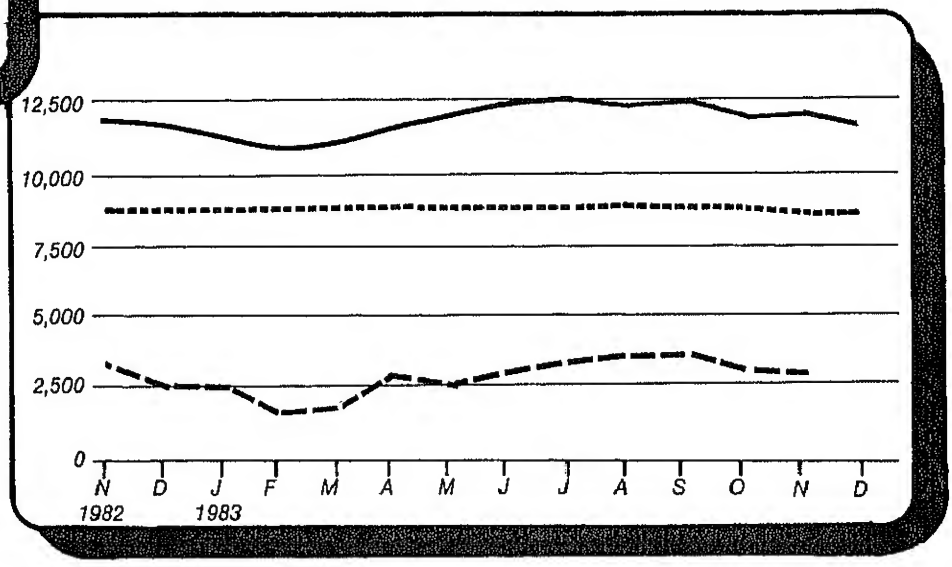
[1] Liquefied Petroleum Gases

Crude Oil Supply and Disposition

(Thousand Barrels Per Day)



Annual

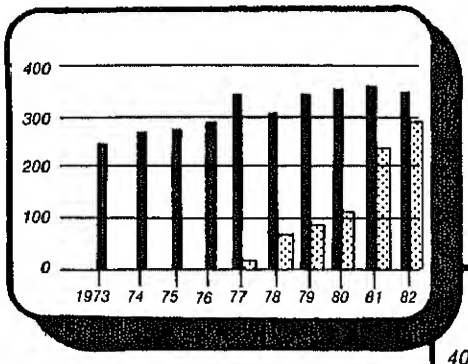


Monthly

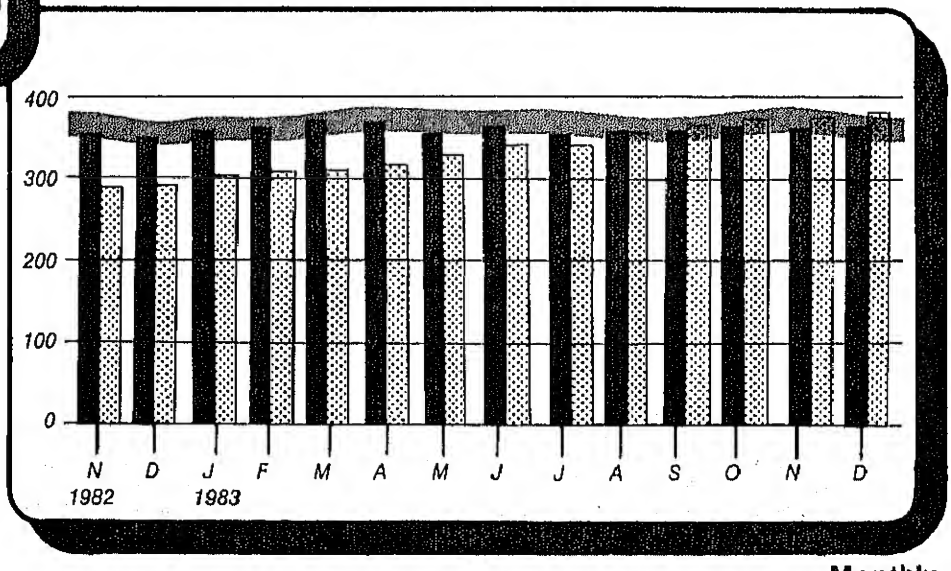
[1] Excludes SPR Imports

Crude Oil Ending Stocks

(Million Barrels)



Annual



Monthly

[1] Level and width of Average Stock Ranges for crude oil is based on 3 years of data, July 80-July 83. See Explanatory Note 6.

Crude Oil[1] Supply and Disposition

	Supply							
	Field Production		Imports			Stock Withdrawal[3]		
	Total Domestic	Alaskan	Total	SPR[4]	Other	SPR[4]	Other	Unaccounted for Crude Oil
	Thousand Barrels per Day							
1973 AVERAGE	9,208	198	3,244		3,244		11	3
1974 AVERAGE	8,774	193	3,477		3,477		-62	-25
1975 AVERAGE	8,375	191	4,105		4,105		-17	17
1976 AVERAGE	8,132	173	5,287		5,287		-39	77
1977 AVERAGE	8,245	464	6,615	21	6,594	-20	-150	-6
1978 AVERAGE	8,707	1,229	6,356	162	6,195	-163	84	-57
1979 AVERAGE	8,552	1,401	6,519	67	6,452	-67	-81	-11
1980 AVERAGE	8,597	1,617	5,263	44	5,219	-45	-52	34
1981 January	8,540	1,606	4,932	106	4,826	-151	[6] 201	113
February	8,604	1,619	4,873	80	4,793	-127	-150	-41
March	8,613	1,618	4,521	140	4,382	-155	-477	154
April	8,557	1,608	4,338	272	4,066	-444	-151	51
May	8,501	1,580	4,287	386	3,901	-513	122	286
June	8,629	1,632	4,061	318	3,743	-434	299	49
July	8,500	1,605	4,296	175	4,121	-324	-36	147
August	8,583	1,602	4,179	257	3,922	-372	769	16
September	8,604	1,607	4,740	435	4,305	-486	201	-295
October	8,563	1,596	4,380	453	3,927	-501	-259	166
November	8,586	1,614	4,046	271	3,774	-259	-66	279
December	8,585	1,623	4,137	165	3,971	-252	82	52
AVERAGE	8,572	1,609	4,396	256	4,141	-336	46	83
1982 January	8,509	1,705	3,693	170	3,523	-159	-242	101
February	8,702	1,707	2,990	159	2,830	-213	-29	156
March	8,667	1,696	2,874	185	2,689	-235	357	2
April	8,591	1,691	2,849	190	2,659	-233	196	231
May	8,683	1,707	3,309	204	3,105	-176	205	111
June	8,646	1,665	3,836	105	3,732	-105	144	133
July	8,658	1,710	4,248	97	4,150	-97	-50	-20
August	8,634	1,697	3,851	208	3,643	-208	-232	189
September	8,701	1,705	3,636	139	3,497	-143	406	-210
October	8,701	1,706	3,670	216	3,454	-216	-332	249
November	8,697	1,676	3,862	180	3,683	-179	-219	-124
December	8,598	1,682	3,000	124	2,877	-125	252	35
AVERAGE	8,649	1,696	3,488	165	3,323	-174	38	71
1983 January	8,634	1,698	2,938	219	2,720	-219	-348	238
February	8,660	1,725	2,268	197	2,071	-197	-185	423
March	8,677	1,726	2,232	201	2,031	-184	240	134
April	8,686	1,710	3,154	205	2,949	-197	-241	191
May	8,682	1,710	3,234	289	2,945	-293	362	148
June	8,676	1,710	3,502	190	3,312	-188	25	480
July	8,647	1,705	3,868	274	3,594	-264	382	-74
August	8,653	1,712	4,174	350	3,823	-358	-423	333
September	8,666	1,722	4,221	309	3,912	-307	116	-6
October	8,654	1,731	3,446	202	3,244	-201	21	69
November*	8,624	1,713	R 3,312	R 171	R 3,141	R -135	R 317	137
December**	8,612	1,713	*3,400*	*270*	*3,129*	*-229*	*-4*	NA
AVERAGE	8,656	1,715	3,318	240	3,078	-232	23	NA

[1] Includes lease condensate.
[2] Stocks are totals as of end of period.
[3] A negative number indicates an increase in stocks and a positive number indicates a decrease.
[4] Strategic Petroleum Reserve.
[5] Begining in January 1983, crude oil used directly as fuel is shown as product supplied.
[6] Stocks of Alaskan crude oil in transit were included in January 1981. Stock withdrawals are calculated using new basis stock levels. See Explanatory Note 11.
Footnotes continued on following page.

Crude Oil[1] Supply and Disposition (continued)

	Supply	Disposition				Ending Stocks[2]		
	Crude Used Directly[5]	Crude Losses	Refinery Inputs	Exports	Products Supplied[5]	Total Crude Oil	SPR[4]	Other Primary
	Thousand Barrels per Day					Million Barrels		
1973 AVERAGE	**-19**	**13**	**12,431**	**2**	**NA**	**242**		**242**
1974 AVERAGE	**-15**	**13**	**12,133**	**3**	**NA**	**265**		**265**
1975 AVERAGE	**-17**	**13**	**12,442**	**6**	**NA**	**271**		**271**
1976 AVERAGE	**-18**	**15**	**13,416**	**8**	**NA**	**285**		**285**
1977 AVERAGE	**-14**	**16**	**14,602**	**50**	**NA**	**348**	**7**	**340**
1978 AVERAGE	**-14**	**16**	**14,739**	**158**	**NA**	**376**	**67**	**309**
1979 AVERAGE	**-13**	**16**	**14,648**	**235**	**NA**	**430**	**91**	**339**
1980 AVERAGE	**-13**	**15**	**13,481**	**287**	**NA**	[6] 466	**108**	[6] 358
1981 January	-43	6	13,247	339	NA	486	112	374
February	-55	3	12,902	198	NA	494	116	378
March	-57	6	12,383	210	NA	514	121	393
April	-59	3	12,091	198	NA	532	134	397
May	-59	3	12,309	312	NA	544	150	394
June	-58	7	12,415	123	NA	548	163	385
July	-58	7	12,261	257	NA	559	173	386
August	-58	5	12,908	204	NA	547	185	362
September	-61	4	12,505	194	NA	555	199	356
October	-63	3	12,057	226	NA	579	215	364
November	-64	4	12,240	278	NA	589	223	366
December	-63	4	12,349	189	NA	594	230	363
AVERAGE	**-58**	**5**	**12,470**	**228**	**NA**			
1982 January	-63	3	11,599	238	NA	606	235	371
February	-64	2	11,236	304	NA	613	241	372
March	-63	5	11,276	321	NA	609	249	361
April	-65	3	11,392	174	NA	610	256	355
May	-62	3	11,806	262	NA	609	261	348
June	-60	7	12,494	94	NA	608	264	344
July	-60	3	12,446	229	NA	613	267	346
August	-57	2	11,871	304	NA	626	274	353
September	-56	4	12,146	184	NA	619	278	341
October	-51	2	11,749	270	NA	636	285	351
November	-51	1	11,724	262	NA	648	290	358
December	-53	1	11,514	193	NA	644	294	350
AVERAGE	**-59**	**3**	**11,774**	**236**	**NA**			
1983 January	NA	2	11,070	117	54	661	301	361
February	NA	3	10,635	262	69	672	306	366
March	NA	2	10,854	174	70	670	312	359
April	NA	2	11,436	88	68	684	318	366
May	NA	1	11,789	280	63	681	327	355
June	NA	1	12,287	144	64	686	332	354
July	NA	2	12,347	145	65	683	341	342
August	NA	1	12,141	172	64	707	352	355
September	NA	1	12,445	177	66	713	361	352
October	NA	1	11,784	140	63	718	367	351
November*	NA	2	R 12,003	186	64	R 713	371	R 341
December**	NA	NA	*11,404*	NA	NA	*727*	*378*	*349*
AVERAGE	**NA**	**NA**	**11,688**	**NA**	**NA**			

Footnotes continued.
* See Explanatory Note 9.2.
** Italics denote estimates based upon preliminary data. See Explanatory Note 8.
R = Revised data. NA = Not available.
Note: Geographic coverage is the 50 States and the District of Columbia.
Totals may not equal sum of components due to independent rounding.
Sources: See the last page of this section.

Crude Oil and Petroleum Product Imports

	Imports from OPEC Sources[1]										
	Algeria	Libya	Saudi Arabia	United Arab Emirates	Indonesia	Iran	Nigeria	Venezuela	Other OPEC[2]	Total OPEC	Total Arab OPEC[3]
	Thousand Barrels per Day										
1973 AVERAGE	**136**	**164**	**486**	**71**	**213**	**223**	**459**	**1,135**	**106**	**2,993**	**915**
1974 AVERAGE	**190**	**4**	**461**	**74**	**300**	**469**	**713**	**979**	**88**	**3,280**	**752**
1975 AVERAGE	**282**	**232**	**715**	**117**	**390**	**280**	**762**	**702**	**122**	**3,601**	**1,383**
1976 AVERAGE	**432**	**453**	**1,230**	**254**	**539**	**298**	**1,025**	**700**	**134**	**5,066**	**2,424**
1977 AVERAGE	**559**	**723**	**1,380**	**335**	**541**	**535**	**1,143**	**690**	**287**	**6,193**	**3,185**
1978 AVERAGE	**649**	**654**	**1,144**	**385**	**573**	**555**	**919**	**645**	**226**	**5,751**	**2,963**
1979 AVERAGE	**636**	**658**	**1,356**	**281**	**420**	**304**	**1,080**	**690**	**212**	**5,637**	**3,056**
1980 AVERAGE	**488**	**554**	**1,261**	**172**	**348**	**9**	**857**	**481**	**130**	**4,300**	**2,551**
1981 January	341	500	1,284	93	424	0	908	549	27	4,127	2,219
February	381	468	1,122	93	406	0	866	463	92	3,891	2,064
March	352	485	1,027	47	328	0	771	360	54	3,425	1,912
April	263	485	1,034	68	307	0	812	237	39	3,245	1,867
May	393	443	933	17	297	0	664	331	124	3,203	1,796
June	356	380	865	60	367	0	528	248	118	2,922	1,703
July	333	251	1,073	80	340	0	651	466	38	3,233	1,757
August	348	274	1,082	61	377	0	321	523	84	3,070	1,765
September	336	154	1,477	96	371	0	323	359	149	3,264	2,063
October	242	147	1,342	90	427	0	412	389	172	3,220	1,820
November	210	132	1,270	112	353	0	517	535	56	3,184	1,724
December	176	122	1,045	158	400	0	684	411	132	3,129	1,502
AVERAGE	**311**	**319**	**1,129**	**81**	**366**	**0**	**620**	**406**	**90**	**3,323**	**1,848**
1982 January	254	161	877	111	289	0	663	376	128	2,859	1,403
February	139	92	693	89	244	0	584	355	102	2,297	1,054
March	91	37	555	155	200	0	522	399	91	2,051	860
April	85	0	511	122	215	0	427	426	85	1,871	740
May	179	0	601	116	236	0	222	422	54	1,830	897
June	115	0	593	94	215	72	537	361	110	2,096	820
July	159	0	660	108	327	69	910	356	95	2,685	965
August	181	0	489	133	271	27	574	299	133	2,107	818
September	179	0	432	57	191	21	477	518	69	1,943	677
October	249	7	494	61	242	108	313	504	106	2,084	810
November	247	14	489	47	283	34	479	528	115	2,235	797
December	155	0	237	12	265	88	462	399	73	1,690	421
AVERAGE	**170**	**26**	**552**	**92**	**248**	**35**	**514**	**412**	**97**	**2,146**	**854**
1983 January	204	0	282	47	255	43	186	324	43	1,384	533
February	104	0	214	9	217	0	92	371	28	1,035	326
March	63	0	103	0	138	0	121	425	173	1,023	183
April	228	0	180	(s)	210	0	186	508	125	1,438	409
May	284	0	122	12	324	37	352	444	69	1,645	419
June	300	0	175	40	502	38	402	335	146	1,938	515
July	282	0	182	58	464	112	525	431	187	2,240	599
August	370	0	426	45	416	213	464	477	230	2,641	866
September	413	0	587	21	516	86	324	472	208	2,627	1,074
October	261	0	638	16	368	12	307	337	169	2,108	938
November	165	0	545	56	318	21	214	435	135	1,891	789
AVERAGE	**244**	**0**	**314**	**28**	**339**	**52**	**290**	**415**	**138**	**1,821**	**606**

[1] Excludes petroleum imported into the United States indirectly from OPEC countries, primarily from Caribbean and West European areas, as refined petroleum products which were refined from crude oil produced in OPEC countries.
[2] Includes Ecuador, Gabon, Iraq, Kuwait, and Qatar.
[3] Includes Algeria, Libya, Saudi Arabia, United Arab Emirates, Iraq, Kuwait, and Qatar.
Footnotes continued on following page.

Crude Oil and Petroleum Product Imports (continued)

	Imports from Non-OPEC Sources [4]										
	Baha-mas	Canada	Mexico	Nether-lands Antilles	Trinidad and Tobago	United Kingdom	Puerto Rico	Virgin Islands	Other Non OPEC	Total Non OPEC	Total Imports
	Thousand Barrels per Day										
1973 AVERAGE	174	1,325	16	585	255	15	99	329	465	3,263	6,256
1974 AVERAGE	164	1,070	8	511	251	8	90	391	340	2,832	6,112
1975 AVERAGE	152	846	71	332	242	14	90	406	300	2,454	6,056
1976 AVERAGE	118	599	87	275	274	31	88	422	353	2,247	7,313
1977 AVERAGE	171	517	179	211	289	126	105	466	550	2,614	8,807
1978 AVERAGE	160	467	318	229	253	180	94	429	484	2,613	8,363
1979 AVERAGE	147	538	439	231	190	202	92	431	548	2,819	8,456
1980 AVERAGE	78	455	533	225	176	176	88	388	491	2,609	6,909
1981 January	39	543	401	198	150	233	89	494	552	2,701	6,827
February	84	546	437	227	163	271	46	481	626	2,881	6,772
March	74	472	488	227	93	263	45	370	571	2,603	6,028
April	68	412	418	198	139	402	40	365	380	2,423	5,668
May	122	365	522	213	105	368	58	344	474	2,573	5,775
June	51	353	538	196	124	397	67	262	525	2,513	5,435
July	77	382	384	212	178	553	50	206	541	2,583	5,816
August	69	378	489	255	123	592	68	184	539	2,698	5,767
September	111	423	708	163	169	528	72	265	661	3,100	6,365
October	63	449	669	161	121	351	60	303	562	2,739	5,959
November	63	547	628	168	108	253	76	294	421	2,557	5,741
December	70	501	587	148	125	280	73	367	563	2,714	5,843
AVERAGE	**74**	**447**	**522**	**197**	**133**	**375**	**62**	**327**	**534**	**2,672**	**5,996**
1982 January	58	513	425	179	106	346	62	334	452	2,474	5,332
February	67	537	476	221	120	181	36	362	508	2,510	4,807
March	43	437	503	189	118	294	62	307	480	2,433	4,484
April	82	360	476	184	166	247	36	266	690	2,507	4,378
May	77	419	766	152	95	516	47	302	607	2,981	4,811
June	32	481	797	148	129	557	58	322	708	3,231	5,327
July	64	536	783	158	118	433	38	376	698	3,204	5,890
August	80	443	853	145	106	520	24	317	650	3,137	5,244
September	92	493	897	195	89	631	51	278	746	3,472	5,414
October	45	459	682	148	109	666	52	262	801	3,222	5,306
November	51	553	860	212	90	623	81	334	706	3,508	5,744
December	88	561	689	174	102	438	48	336	480	2,916	4,606
AVERAGE	**65**	**482**	**685**	**175**	**112**	**456**	**50**	**316**	**627**	**2,968**	**5,113**
1983 January	68	536	849	218	73	315	40	299	588	2,988	4,372
February	92	592	722	179	81	193	50	192	554	2,655	3,691
March	86	488	760	187	78	240	43	162	563	2,606	3,629
April	167	452	981	216	85	421	20	183	781	3,306	4,744
May	135	501	944	153	108	483	42	235	651	3,252	4,898
June	137	576	831	181	120	424	48	252	712	3,281	5,218
July	69	633	849	191	103	369	37	364	836	3,450	5,690
August	142	540	891	194	90	461	40	313	725	3,395	6,036
September	137	523	832	251	82	472	33	308	822	3,461	6,088
October	164	539	771	172	106	414	48	370	565	3,149	5,256
November	143	542	717	144	110	334	55	440	793	3,278	5,168
AVERAGE	**122**	**538**	**832**	**190**	**94**	**376**	**41**	**284**	**690**	**3,168**	**4,989**

Footnotes continued.

[4] Includes petroleum imported into the United States indirectly from OPEC countries, primarily from Caribbean and West European areas, as refined petroleum products which were refined from crude oil produced in OPEC countries.

(s) = Less than 500 barrels.

Note: Beginning in October 1977, Strategic Petroleum Reserve imports are included.

Totals may not equal sum of components due to independent rounding.

Geographic coverage: The 50 United States and the District of Columbia.

Sources: See the last page of this section.

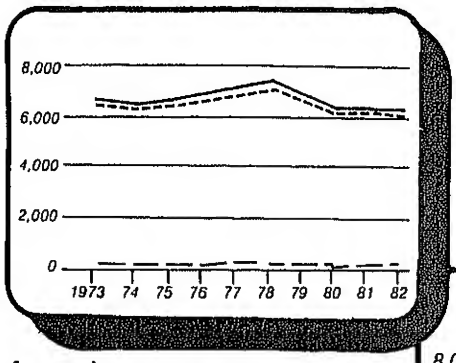
Finished Motor Gasoline Supply and Disposition

	Supply			Disposition				Ending Stocks[1]	
	Total Production	Imports[2]	Stock Withdrawal[2,3]	Exports	Product Supplied: Total	Product Supplied: Unleaded[4]	Unleaded	Total Motor Gasoline[5]	Finished Motor Gasoline
	Thousand Barrels per Day						Percent of Total	Million Barrels	
1973 AVERAGE	6,535	134	9	4	6,674	NA	NA	209	
1974 AVERAGE	6,360	204	-24	2	6,537	NA	NA	[6] 218	
1975 AVERAGE	6,520	184	[6] -28	2	6,675	NA	NA	235	
1976 AVERAGE	6,841	131	10	3	6,978	NA	NA	231	
1977 AVERAGE	7,033	217	-72	2	7,177	1,976	27.5	258	
1978 AVERAGE	7,169	190	54	1	7,412	2,521	34.0	238	
1979 AVERAGE	6,852	181	2	(s)	7,034	2,798	39.8	237	
1980 AVERAGE	6,506	140	-66	1	6,579	3,067	46.6	[6] 261	
1981 January[7]	6,715	138	[6] -421	(s)	6,431	3,141	48.8	276	227
February	6,308	111	-118	1	6,301	3,095	49.1	284	230
March	6,213	171	-81	(s)	6,303	3,097	49.1	285	232
April	6,114	186	303	(s)	6,602	3,284	49.7	272	223
May	6,122	150	344	1	6,615	3,115	47.1	259	213
June	6,220	186	622	1	7,028	3,419	48.6	242	194
July	6,405	151	268	(s)	6,823	3,424	50.2	228	186
August	6,611	124	-95	3	6,637	3,344	50.4	233	189
September	6,564	169	-70	2	6,662	3,338	50.1	237	191
October	6,426	147	7	3	6,578	3,257	49.5	236	190
November	6,564	148	-338	1	6,373	3,198	50.2	248	201
December	6,586	197	-91	11	6,681	3,444	51.5	253	203
AVERAGE	6,405	157	28	2	6,588	3,264	49.5		
1982 January	6,167	128	-316	18	5,961	3,067	51.5	261	213
February	5,899	133	172	8	6,196	3,210	51.8	257	208
March	5,994	183	334	44	6,466	3,358	51.9	247	198
April	6,095	185	650	33	6,897	3,495	50.7	221	179
May	6,319	182	177	23	6,655	3,415	51.3	214	173
June	6,754	230	-134	14	6,835	3,565	52.2	219	177
July	6,768	225	-178	24	6,790	3,577	52.7	226	183
August	6,419	291	-81	16	6,614	3,526	53.3	227	185
September	6,527	223	-198	22	6,531	3,404	52.1	234	191
October	6,262	185	-42	15	6,391	3,351	52.4	234	192
November	6,273	211	101	11	6,574	3,451	52.5	230	189
December	6,542	178	-165	7	6,549	3,485	53.2	[6] 235	[6] 194
AVERAGE	6,338	197	25	20	6,539	3,409	52.1		
1983 January	6,020	148	[6] -186	(s)	5,981	3,352	56.0	251	208
February	5,848	142	32	(s)	6,022	3,257	54.1	251	207
March	5,897	205	765	23	6,843	3,620	52.9	224	184
April	6,202	273	27	1	6,501	3,505	53.9	221	183
May	6,386	284	-128	1	6,540	3,547	54.2	225	187
June	6,646	265	118	22	7,008	3,796	54.2	223	183
July	6,704	297	-210	18	6,773	3,752	55.4	231	190
August	6,539	260	159	13	6,946	3,836	55.2	226	185
September	6,582	285	-160	14	6,693	3,671	54.8	230	190
October	6,188	335	60	2	6,581	3,698	56.2	228	188
November*	R 6,636	R 269	R -274	2	R 6,629	R 3,714	56.0	236	196
December**	*6,310*	*241*	*71*	NA	*6,614*	NA	NA	*228*	*191*
AVERAGE	6,332	251	24	NA	6,598	NA	NA		

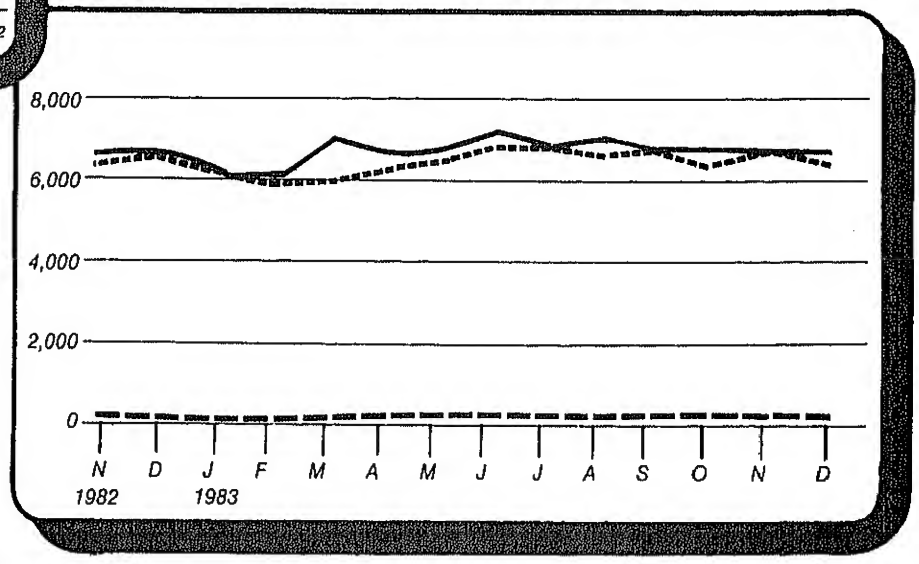
[1] Stocks are totals as of end of period.
[2] Beginning in 1981, excludes blending components.
[3] A negative number indicates an increase in stocks and a positive number indicates a decrease.
[4] Includes gasohol.
[5] Includes motor gasoline blending components.
[6] In January 1975, 1981, and 1983, numerous respondents were added to surveys affecting stocks reported and stock withdrawal calculations. See Explanatory Note 10.
[7] Beginning in January 1981, survey forms were modified. See Explanatory Note 12.
* See Explanatory Note 9.3.
** Italics denote estimates based upon preliminary data. See explanatory Note 8.
R = Revised Data. NA = Not available. (s) = Less than 500 barrels per day.
Note: Geographic coverage is the 50 States and the District of Columbia.
Totals may not equal sum of components due to independent rounding.
Sources: See the last page of this section.

Motor Gasoline Supply and Disposition

(Thousand Barrels Per Day)



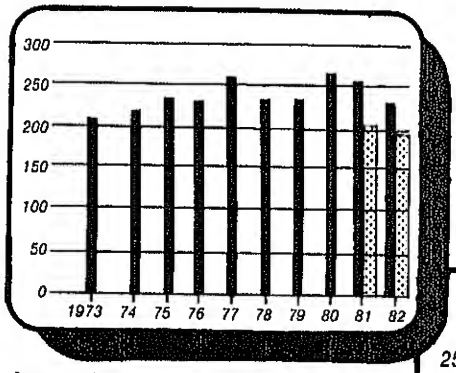
Annual



Monthly

Motor Gasoline Ending Stocks

(Million Barrels)



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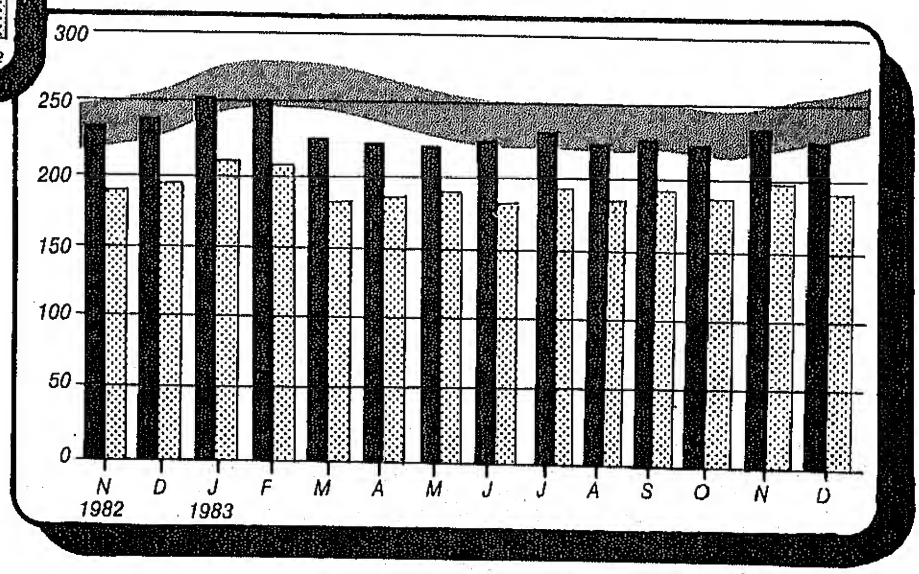


Monthly

[1] Includes finished motor gasoline blending components

[2] Level and width of Average Stock Range for total motor gasoline based on 3 years of data, July 80-June 83. See Explanatory Note 6.

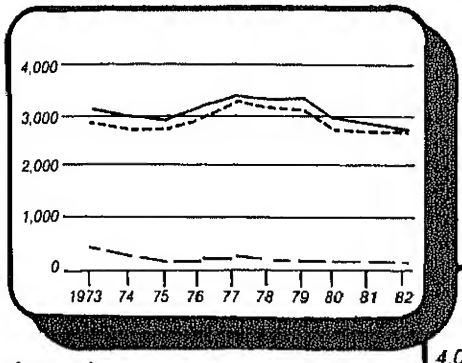
Distillate Fuel Oil Supply and Disposition

	Supply				Disposition		Ending Stocks[1]
	Total Production	Imports	Stock Withdrawal[2]	Crude Used Directly[3]	Exports	Products Supplied[3]	
	Thousand Barrels per Day						Million Barrels
1973 AVERAGE	**2,822**	**392**	**-115**	**2**	**9**	**3,092**	**196**
1974 AVERAGE	**2,669**	**289**	**-9**	**2**	**2**	**2,948**	**[4] 200**
1975 AVERAGE	**2,654**	**155**	**[4] 40**	**2**	**1**	**2,851**	**209**
1976 AVERAGE	**2,924**	**146**	**62**	**1**	**1**	**3,133**	**186**
1977 AVERAGE	**3,278**	**250**	**-176**	**1**	**1**	**3,352**	**250**
1978 AVERAGE	**3,167**	**173**	**93**	**1**	**3**	**3,432**	**216**
1979 AVERAGE	**3,153**	**193**	**-34**	**1**	**3**	**3,311**	**229**
1980 AVERAGE	**2,662**	**142**	**64**	**1**	**3**	**2,866**	**[4] 205**
1981 January[5]	2,989	273	[4] 836	11	(s)	4,109	179
February	2,809	325	246	11	17	3,373	173
March	2,484	147	264	9	(s)	2,904	164
April	2,418	116	-9	10	3	2,532	165
May	2,454	179	-232	10	(s)	2,411	172
June	2,501	225	-270	9	(s)	2,464	180
July	2,395	179	-204	10	2	2,378	186
August	2,656	174	-450	8	(s)	2,388	200
September	2,610	129	-235	10	1	2,513	207
October	2,485	119	197	9	5	2,803	201
November	2,716	124	36	11	6	2,880	200
December	2,856	95	277	11	26	3,212	192
AVERAGE	**2,613**	**173**	**38**	**10**	**5**	**2,829**	
1982 January	2,591	97	876	10	90	3,484	164
February	2,427	132	605	11	90	3,085	147
March	2,288	48	682	10	84	2,945	126
April	2,358	59	612	13	64	2,978	108
May	2,618	74	-183	10	75	2,444	114
June	2,729	102	-335	10	55	2,452	124
July	2,734	125	-789	11	24	2,058	148
August	2,507	80	-339	10	40	2,218	159
September	2,657	61	-85	12	139	2,507	161
October	2,838	91	-289	8	66	2,581	170
November	2,860	145	-514	8	24	2,475	186
December	2,655	109	225	10	143	2,855	[4] 179
AVERAGE	**2,606**	**93**	**35**	**10**	**74**	**2,671**	
1983 January	2,314	58	[4] 561	NA	173	2,760	168
February	2,136	58	742	NA	105	2,832	147
March	1,991	42	926	NA	59	2,900	119
April	2,169	73	518	NA	47	2,713	103
May	2,444	141	-193	NA	50	2,341	109
June	2,545	175	-154	NA	40	2,526	114
July	2,600	259	-556	NA	55	2,248	131
August	2,612	302	-403	NA	43	2,467	144
September	2,725	253	-374	NA	37	2,568	155
October	2,682	255	-275	NA	55	2,606	163
November*	R 2,679	R 189	R 65	NA	54	R 2,879	R 161
December**	*2,566*	*170*	*560*	NA	NA	*3,250*	*144*
AVERAGE	**2,457**	**165**	**114**	**NA**	**NA**	**2,673**	

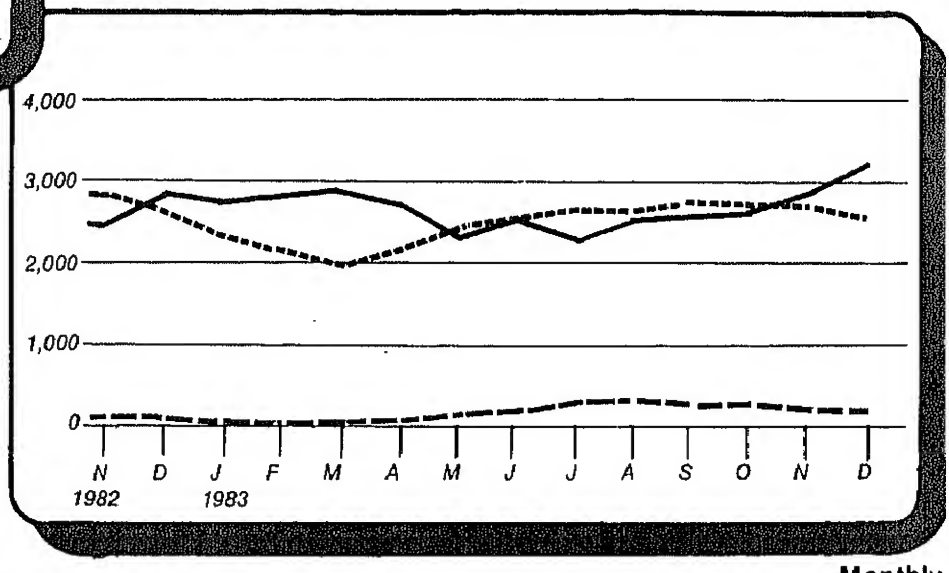
[1] Stocks are totals as of end of period.
[2] A negative number indicates an increase in stocks and a positive number indicates a decrease.
[3] Beginning in January 1983, product supplied for distillate fuel oil does not include crude oil used directly. See Explanatory Note 4.
[4] In January 1975, 1981, and 1983, numerous respondents were added to surveys affecting stocks reported and stock withdrawal calculations. See Explanatory Note 10.
[5] Beginning in January 1981, survey forms were modified. See Explanatory Note 12.
* See Explanatory Note 9.4.
** Italics denote estimates based on preliminary data. See Explanatory Note 8.
R = Revised data. NA = Not available. (s) = Less than 500 barrels per day.
Note: Geographic coverage is the 50 states and the District of Columbia.
Totals may not equal sum of components due to independent rounding.
Sources: See the last page of this section.

Distillate Fuel Oil Supply and Disposition

(Thousand Barrels Per Day)



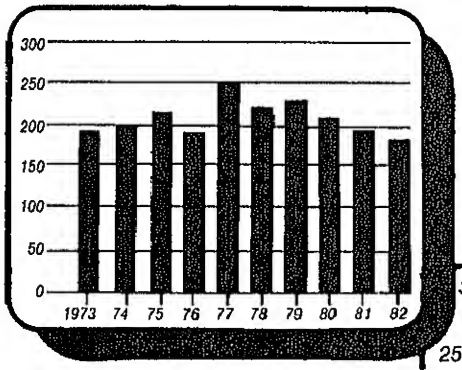
Annual



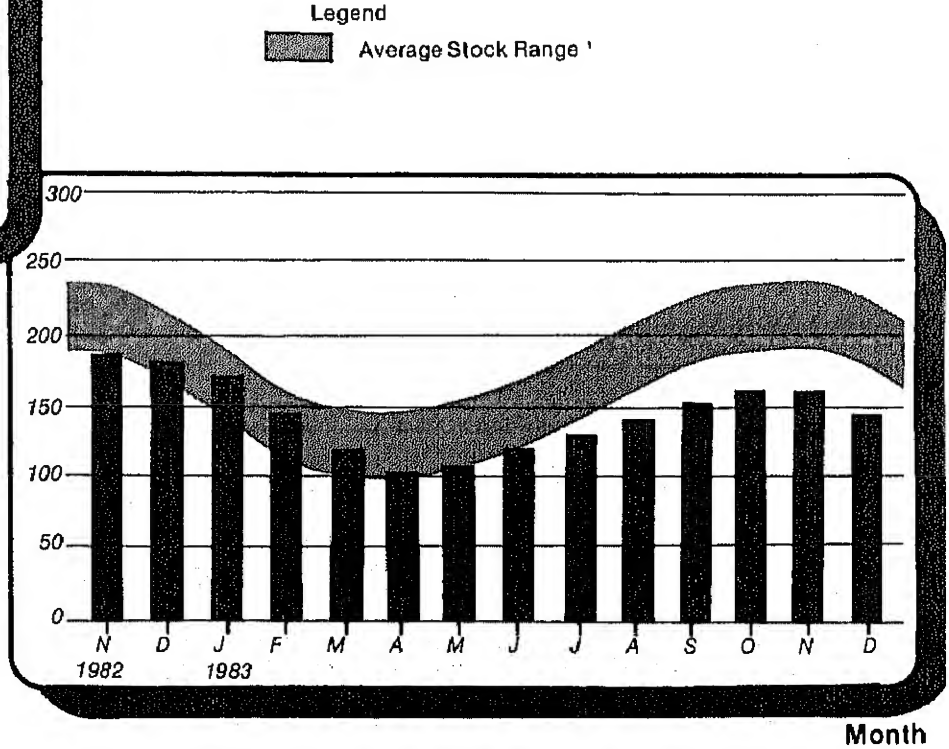
Monthly

Distillate Fuel Oil Ending Stocks

(Million Barrels)



Annual



Month

¹ Level and width of Average Stock Range for distillate fuel oil is based on 3 years of data, July 80-July 83. See Explanatory Note 6.

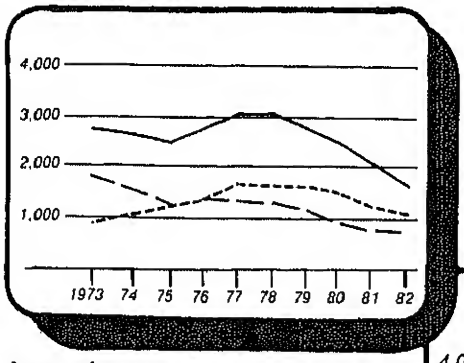
Residual Fuel Oil Supply and Disposition

	Supply				Disposition		Ending Stocks[1]
	Total Production	Imports	Stock Withdrawal[2]	Crude Used Directly[3]	Exports	Products Supplied[3]	
	Thousand Barrels per Day						Million Barrels
1973 AVERAGE	**971**	**1,853**	**5**	**17**	**23**	**2,822**	**53**
1974 AVERAGE	**1,070**	**1,587**	**-17**	**13**	**14**	**2,639**	**[4] 60**
1975 AVERAGE	**1,235**	**1,223**	**[4] 2**	**15**	**15**	**2,462**	**74**
1976 AVERAGE	**1,377**	**1,413**	**5**	**17**	**12**	**2,801**	**72**
1977 AVERAGE	**1,754**	**1,359**	**-48**	**13**	**6**	**3,071**	**90**
1978 AVERAGE	**1,667**	**1,355**	**-1**	**13**	**13**	**3,023**	**90**
1979 AVERAGE	**1,687**	**1,151**	**-15**	**12**	**9**	**2,826**	**96**
1980 AVERAGE	**1,580**	**939**	**10**	**12**	**33**	**2,508**	**[4] 92**
1981 January[5]	1,612	1,015	[4] 302	32	65	2,896	82
February	1,565	954	150	44	125	2,588	78
March	1,424	699	100	48	145	2,126	75
April	1,320	584	66	49	151	1,868	73
May	1,223	741	-170	49	25	1,817	78
June	1,232	540	291	49	76	2,037	69
July	1,174	830	2	48	82	1,971	69
August	1,231	819	-179	50	69	1,852	75
September	1,292	841	-176	51	126	1,882	80
October	1,238	786	8	54	202	1,884	80
November	1,227	880	-49	53	203	1,909	81
December	1,329	916	110	52	157	2,250	78
AVERAGE	**1,321**	**800**	**37**	**48**	**118**	**2,088**	
1982 January	1,235	831	301	53	235	2,185	69
February	1,186	956	363	53	213	2,344	58
March	1,123	912	12	53	197	1,903	58
April	1,166	788	150	52	234	1,923	54
May	1,128	742	-172	52	191	1,560	59
June	1,074	652	-57	50	217	1,501	61
July	1,028	657	56	49	239	1,550	59
August	965	551	203	47	235	1,531	53
September	1,008	872	-306	44	148	1,470	62
October	955	783	-57	43	234	1,490	64
November	989	837	-94	43	182	1,591	66
December	989	747	6	43	186	1,598	[4] 66
AVERAGE	**1,070**	**776**	**32**	**48**	**209**	**1,716**	
1983 January	935	691	[4] 243	NA	294	1,574	61
February	857	632	270	NA	191	1,568	53
March	833	686	220	NA	169	1,569	46
April	942	743	-10	NA	310	1,364	47
May	930	709	-139	NA	190	1,310	51
June	832	676	28	NA	219	1,317	50
July	771	682	-58	NA	90	1,306	52
August	706	705	115	NA	165	1,362	48
September	815	690	-47	NA	134	1,324	50
October	799	634	-56	NA	153	1,224	51
November*	R 848	R 777	R -101	NA	167	R 1,358	R 54
December**	*886*	*570*	*77*	NA	NA	*1,389*	*48*
AVERAGE	**846**	**683**	**44**	**NA**	**NA**	**1,388**	

[1] Stocks are totals as of end of period.
[2] A negative number indicates an increase in stocks and a positive number indicates a decrease.
[3] Beginning in January 1983, product supplied for residual fuel oil does not include crude oil used directly. See Explanatory Note 4.
[4] In January 1975, 1981, and 1983, numerous respondents were added to surveys affecting stocks reported and stock withdrawal calculations. See Explanatory Note 10.
[5] Beginning in January 1981, survey forms were modified. See Explanatory Note 12.
* See Explanatory Note 9.4.
** Italics denote preliminary data. See Explanatory Note 8.
R = Revised data. NA = Not available. (s) = Less than 500 barrels per day.
Note: Geographic coverage is the 50 States and the District of Columbia.
Totals may not equal sum of components due to independent rounding.
Sources: See the last page of this section.

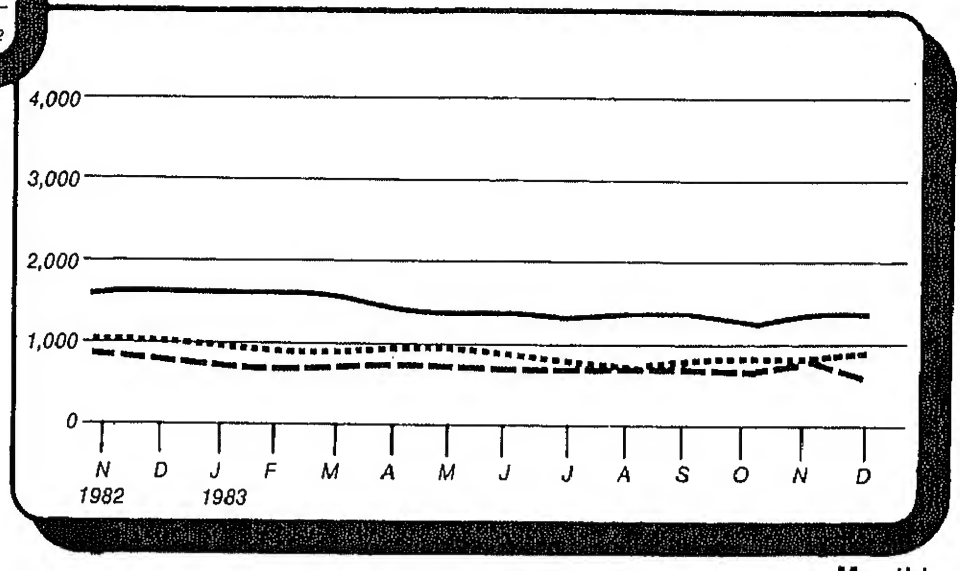
Residual Fuel Oil Supply and Disposition

(Thousand Barrels Per Day)



Legend
Product Supplied
Total Production
Imports

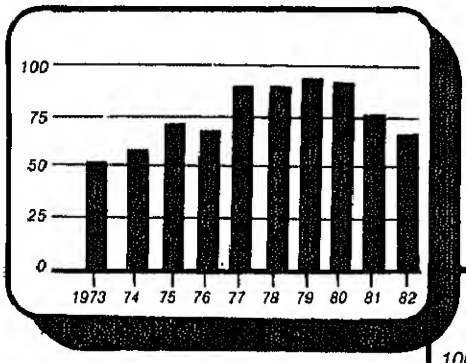
Annual



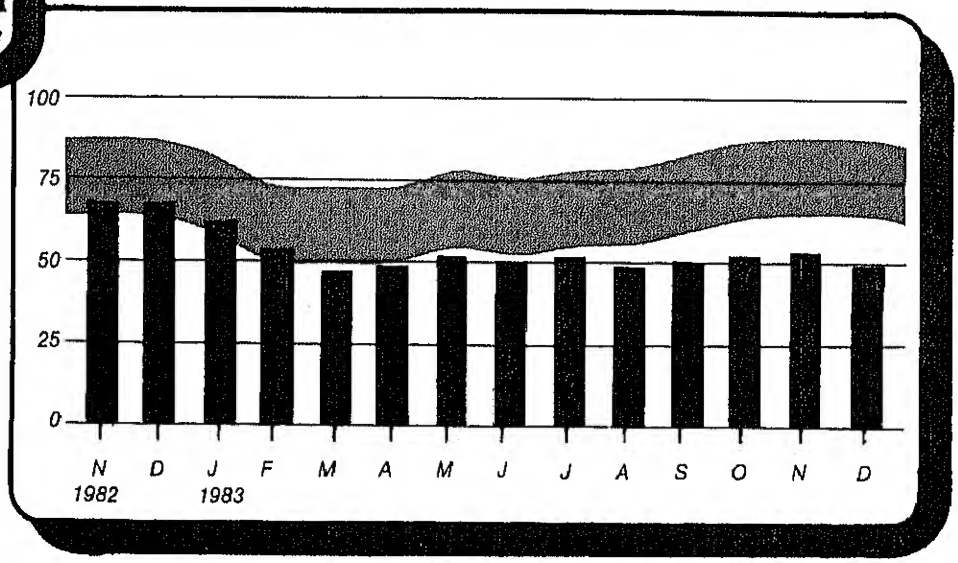
Monthly

Residual Fuel Oil Ending Stocks

(Million Barrels)



Legend
Average Stock Range [1]



Monthly

[1] Level and width of Average Stock Range for residual fuel oil based on 3 years of data, July 80-June 83. See Explanatory Note 6.

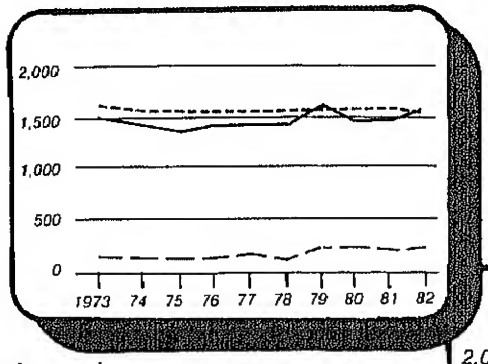
Liquefied Petroleum Gases Supply and Disposition

	Supply			Disposition			Ending Stocks[1]
	Total Production	Imports	Stock Withdrawal[2]	Refinery Inputs	Exports	Products Supplied	
	Thousand Barrels per Day						Million Barrels
1973 AVERAGE	**1,600**	**132**	**-35**	**220**	**27**	**1,449**	**99**
1974 AVERAGE	**1,565**	**123**	**-38**	**220**	**25**	**1,406**	**[3] 113**
1975 AVERAGE	**1,527**	**112**	**[3] -35**	**246**	**26**	**1,333**	**125**
1976 AVERAGE	**1,535**	**130**	**24**	**260**	**25**	**1,404**	**116**
1977 AVERAGE	**1,566**	**161**	**-55**	**233**	**18**	**1,422**	**136**
1978 AVERAGE	**1,537**	**123**	**12**	**239**	**20**	**1,413**	**132**
1979 AVERAGE	**1,556**	**217**	**70**	**236**	**15**	**1,592**	**111**
1980 AVERAGE	**1,535**	**216**	**-27**	**233**	**21**	**1,469**	**[3] 120**
1981 January	1,617	306	[3] 363	352	21	1,913	117
February	1,593	327	173	303	21	1,769	112
March	1,551	260	-4	257	20	1,530	112
April	1,586	214	-236	231	26	1,308	119
May	1,587	189	-258	220	19	1,279	127
June	1,567	206	-208	237	24	1,304	133
July	1,507	213	-258	215	17	1,229	141
August	1,592	195	-242	235	149	1,160	149
September	1,622	199	-75	287	21	1,438	151
October	1,593	287	72	320	76	1,556	149
November	1,571	280	86	383	58	1,495	146
December	1,468	255	379	428	50	1,624	135
AVERAGE	**1,571**	**244**	**-18**	**289**	**42**	**1,466**	
1982 January	1,565	314	443	391	67	1,863	121
February	1,466	291	243	327	51	1,621	114
March	1,544	223	211	289	74	1,615	108
April	1,506	188	98	257	77	1,458	105
May	1,565	186	-71	234	43	1,403	107
June	1,515	192	-86	262	106	1,254	109
July	1,476	227	-13	253	37	1,399	110
August	1,511	125	-45	254	61	1,276	111
September	1,538	247	37	274	85	1,463	110
October	1,517	194	97	306	81	1,421	107
November	1,542	267	175	363	37	1,583	102
December	1,580	258	256	395	56	1,642	[3] 94
AVERAGE	**1,528**	**226**	**111**	**300**	**65**	**1,499**	
1983 January	1,662	240	[3] 618	313	118	2,088	84
February	1,560	305	84	237	76	1,636	81
March	1,517	166	-51	189	127	1,316	83
April	1,531	124	-107	198	116	1,232	86
May	1,545	167	-326	207	84	1,094	96
June	1,593	172	-333	205	59	1,169	106
July	1,571	191	-206	217	55	1,284	112
August	1,505	160	-183	229	29	1,225	118
September	1,625	178	-23	236	86	1,457	119
October	1,688	160	-61	268	32	1,487	121
November*	1,784	180	78	361	33	1,648	118
AVERAGE	**1,598**	**185**	**-47**	**242**	**74**	**1,420**	

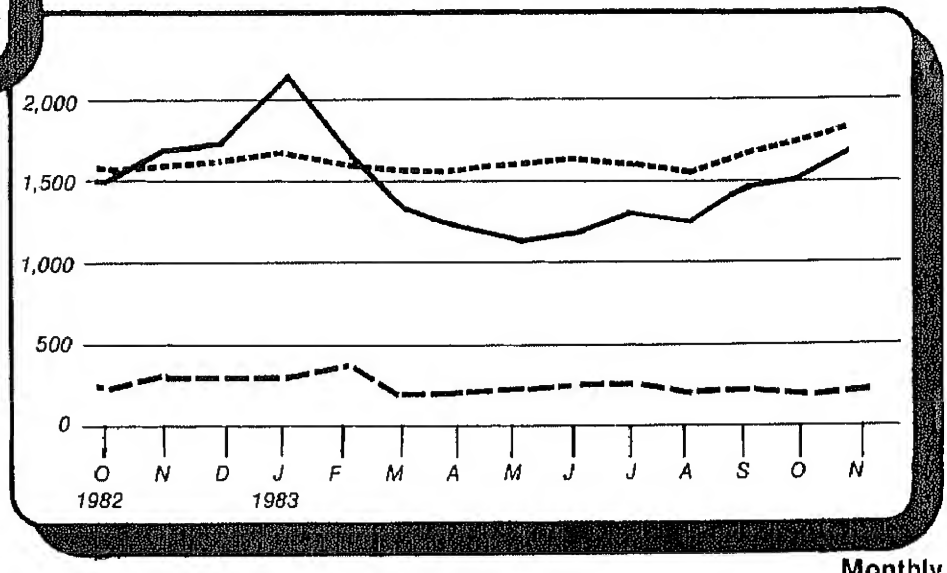
[1] Stocks are totals as of end of period.
[2] A negative number indicates an increase in stocks and a positive number indicates a decrease.
[3] In January 1975, 1981, and 1983, numerous respondents were added to surveys affecting stocks reported and stock withdrawal calculations. See Explanatory Note 10.
* See Explanatory Note 9.5.
Note: Geographic coverage is the 50 States and the District of Columbia.
Totals may not equal sum of components due to independent rounding.
Sources: See the last page of this section.

Liquefied Petroleum Gases Supply and Disposition

(Thousand Barrels Per Day)



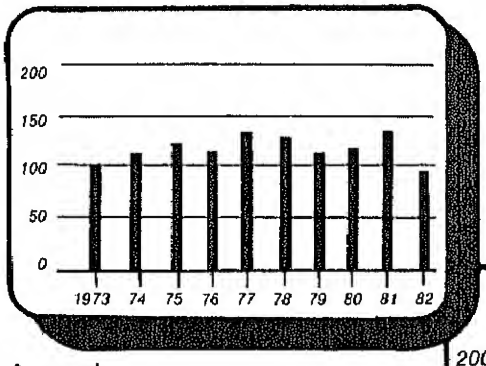
Annual



Monthly

Liquefied Petroleum Gases Ending Stocks

(Million Barrels)



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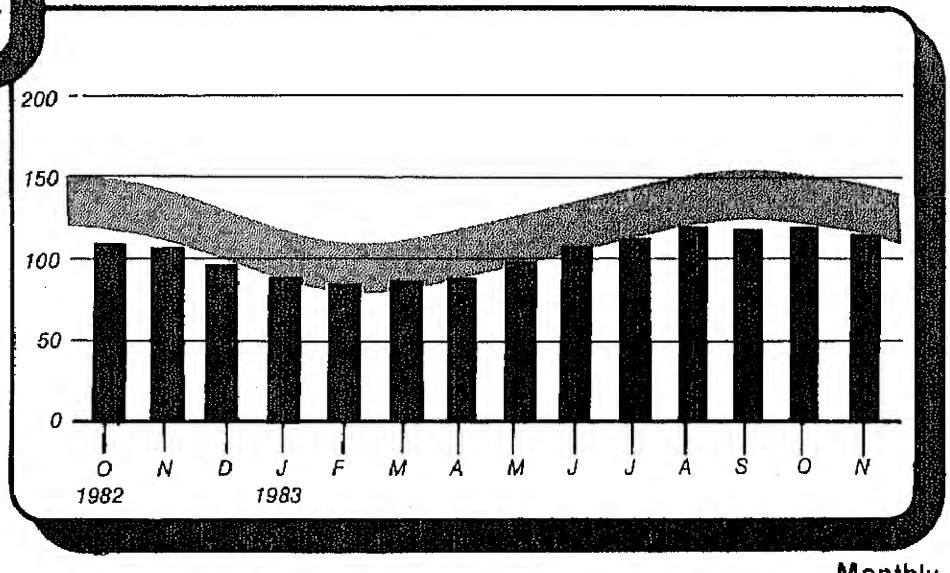


Monthly

[1] Level and width of Average Stock range for liquefied petroleum gases based on 3 years of data, July 80-June 83. See Explanatory Note 6.

Other Petroleum Products[1] Supply and Disposition

	Supply			Disposition			Ending Stocks[2]
	Total Production	Imports	Stock Withdrawal[3]	Refinery Inputs	Exports	Products Supplied	
	Thousand Barrels per Day						Million Barrels
1973 AVERAGE	3,693	502	-9	750	166	3,270	208
1974 AVERAGE	3,558	432	-28	665	174	3,123	[4] 218
1975 AVERAGE	3,424	277	[4] -2	537	160	3,002	219
1976 AVERAGE	3,643	206	-5	524	175	3,145	220
1977 AVERAGE	3,912	205	-27	514	165	3,410	230
1978 AVERAGE	4,046	166	14	492	167	3,568	225
1979 AVERAGE	4,153	195	-37	352	209	3,749	238
1980 AVERAGE	3,956	210	-23	311	198	3,634	[4] 247
1981 January	3,821	162	[4] 80	851	132	3,081	296
February	3,723	182	-200	538	208	2,958	302
March	3,722	230	-55	642	210	3,043	304
April	3,711	230	24	733	192	3,040	303
May	3,892	229	-58	594	238	3,231	305
June	3,925	218	-29	656	197	3,261	306
July	3,852	149	284	791	212	3,282	297
August	3,876	276	-33	676	219	3,225	298
September	3,718	285	215	883	176	3,159	291
October	3,503	241	193	710	227	3,000	285
November	3,579	262	33	784	154	2,935	284
December	3,543	243	71	805	223	2,829	282
AVERAGE	**3,739**	**226**	**46**	**723**	**199**	**3,088**	
1982 January	3,171	269	-7	624	180	2,631	282
February	3,403	305	-153	663	138	2,755	287
March	3,466	243	-191	725	161	2,631	293
April	3,408	309	73	796	204	2,790	290
May	3,317	318	184	824	210	2,785	285
June	3,547	315	123	812	216	2,954	281
July	3,660	408	-1	856	187	3,023	281
August	3,583	346	217	743	202	3,201	274
September	3,533	375	105	749	213	3,051	271
October	3,529	383	244	915	266	2,976	264
November	3,498	423	-28	837	269	2,786	264
December	3,324	313	366	885	275	2,842	[4] 253
AVERAGE	**3,453**	**334**	**80**	**787**	**211**	**2,869**	
1983 January	3,222	297	[4] -371	570	271	2,307	271
February	3,270	287	-1	680	232	2,645	271
March	3,400	298	-94	570	249	2,786	273
April	3,363	377	3	596	247	2,901	273
May	3,448	364	26	694	242	2,902	273
June	3,674	427	99	715	292	3,197	270
July	3,703	393	106	757	209	3,237	266
August	3,774	435	23	689	242	3,302	266
September	3,861	460	-31	768	236	3,287	267
October	3,579	427	-124	701	195	2,985	270
November*	3,560	442	101	912	238	2,955	267
AVERAGE	**3,534**	**383**	**-25**	**695**	**241**	**2,956**	

[1] Includes natural gasoline and isopentane, unfractionated stream, plant condensate, other liquids; and all finished petroleum products except finished motor gasoline, distillate fuel oil, residual fuel oil, and liquefied petroleum gases.
[2] Stocks are totals as of end of period.
[3] A negative number indicates an increase in stocks and a positive number indicates a decrease.
[4] In January 1975, 1981, and 1983, numerous respondents were added to surveys affecting stocks reported and stock withdrawal calculations. See Explanatory Note 10.
* See Explanatory Note 9,6.
Note: Geographic coverage is the 50 States and the District of Columbia.
Totals may not equal sum of components due to independent rounding.
Sources: See the last page of this section.

Sources

1. 1973 through 1976: U.S. Department of the Interior, Bureau of Mines, Mineral Industry Surveys, "Petroleum Statement, Annual" and "PAD Districts Supply/Demand, Annual."

2. 1977 through 1980: Energy Information Administration (EIA), *Energy Data Reports*, "Petroleum Statement, Annual" and "PAD Districts Supply/Demand, Annual," and unleaded gasoline data from *Monthly Petroleum Statistics Report.*

3. January 1981 through December 1982: EIA, *Petroleum Supply Annual.*

4. January 1983 through November 1983: Detailed statistics in appropriate issues of the Petroleum Supply Monthly. (see Explanatory Notes 9.1 through 9.6).

5. December 1983: Estimates based on EIA weekly data (except domestic crude oil production) (see Explanatory Note 1.1).

6. January 1983 through December 1983: Domestic crude oil production estimate based on historical statistics from State Conservation Agencies and the U.S. Geological Survey. (See Explanatory Note 3).

Detailed Statistics

Table 1. U.S. Petroleum Balance, November 1983

	Current Month		Year-to-date	
	Thousand Barrels	Thousand Barrels per Day	Thousand Barrels	Thousand Barrels per Day
Crude Oil (Including Lease Condensate)				
Field Production				
(1) Alaska	E 51,387	1,713	E 672,723	1,715
(2) Lower 48 States	E 207,321	6,911	E 2,319,672	6,945
(3) Total U.S.	E 258,708	8,624	E 2,892,395	8,660
Net Imports				
(4) Imports (Gross Excluding SPR)	94,237	3,141	1,026,468	3,073
(5) SPR Imports	5,115	171	79,310	237
(6) Exports	5,567	186	57,011	171
(7) Imports (Net Including SPR)	93,785	3,126	1,048,768	3,140
Other Sources				
(8) SPR Withdrawal (+) or Addition (-)	-4,051	-135	-77,464	-232
(9) Other Stock Withdrawal (+) or Addition (-)	9,500	317	8,561	26
(10) Product Supplied and Losses	-1,977	-66	-22,062	-66
(11) Unaccounted for [1]	4,112	137	62,218	186
(12) Total Other Sources	7,584	253	-28,747	-86
(13) Crude Input to Refineries	360,077	12,003	3,912,416	11,714
(13) = (3) + (7) + (12)				
Natural Gas Plant Liquids (NGPL)				
(14) Field Production	49,088	1,636	523,178	1,566
(15) Imports [2]	432	14	4,646	14
(16) Stock Withdrawal (+) or Addition (-) [2]	1,775	59	-5,269	-16
(17) Total NGPL Supply	51,295	1,710	522,555	1,565
Other Liquids				
Unfinished Oils and Gasoline Blending Components, Total				
(18) Stock Withdrawal (+) or Addition (-)	3,850	128	-1,651	-5
(19) Imports	9,226	308	87,987	263
(20) Other Hydrocarbons and Alcohol New Supply (Field Production)	1,492	50	17,853	53
(21) Refinery Processing Gain [1]	16,360	545	161,670	484
(22) Crude Oil Product Supplied	1,929	64	21,568	65
(23) Total Other Liquids	32,857	1,095	287,427	861
(23) = (18) through (22)				
(24) Total Production of Products [3]	444,229	14,808	4,722,398	14,139
(24) = (13) + (17) + (23)				
Net Imports of Refined Products [3]				
(25) Imports (Gross)	46,036	1,535	467,788	1,401
(26) Exports	14,812	494	193,040	578
(27) Imports (Net)	31,224	1,041	274,748	823
(28) Total New Supply of Products	475,454	15,848	4,997,146	14,962
(28) = (24) + (27)				
(29) Refined Products Stock Withdrawal (+) or Addition (-) [3]	-9,469	-316	27,567	83
(30) Total Petroleum Products Supplied for Domestic Use	465,985	15,533	5,024,713	15,044
(30) = (28) + (29)				
(31) Finished Motor Gasoline	198,862	6,629	2,203,151	6,596
(32) Distillate Fuel Oil	86,371	2,879	874,871	2,619
(33) Residual Fuel Oil	40,731	1,358	463,502	1,388
(34) Liquefied Petroleum Gases	49,444	1,648	474,326	1,420
(35) Other[4]	88,648	2,955	987,295	2,956
(36) Crude Oil	1,929	64	21,568	65
(37) Total Product Supplied	465,985	15,533	5,024,713	15,044
(37) = (31) through (36)				
Ending Stocks, All Oils				
(38) Crude Oil and Lease Condensate (Excluding SPR)	341,483	--	341,483	--
(39) Strategic Petroleum Reserve (SPR)	371,291	--	371,291	--
(40) Unfinished Oils	108,994	--	108,994	--
(41) Gasoline Blending Components	40,479	--	40,479	--
(42) Natural Gasoline and Unfractionated Stream[2]	16,737	--	16,737	--
(43) Finished Refined Products [3]	631,289	--	631,289	--
(44) Total Stocks	1,510,273	--	1,510,273	--

1 A balancing item.
2 Includes isopentane, natural gasoline, unfractionated stream, and plant condensate only.
3 For products included see Explanatory Note 9.7.
4 Includes natural gasoline and isopentane, unfractionated stream, plant condensate, other liquids; and all finished petroleum products except finished motor gasoline, distillate fuel oil, residual fuel oil and liquefied petroleum gases.
E = Estimated.
-- Not Applicable.
Note: Totals may not equal sum of components due to independent rounding.
Sources and estimation procedures: See Explanatory Notes 1, 2 and 9.7.

Table 2. Supply and Disposition of Crude Oil and Petroleum Products, November 1983
(Thousand Barrels)

Commodity	Supply					Disposition				
	Field Production	Refinery Production	Imports	Stock Withdrawal (+) or Addition (-)	Unaccounted For Crude Oil[1]	Crude Losses	Refinery Inputs	Exports	Products Supplied	Ending Stocks
Crude Oil (including lease condensate)	E 258,708	0	99,352	5,449	4,112	48	360,077	5,567	1,929	712,774
Natural Gas Liquids and LRGs	48,773	10,361	5,830	4,120	0	0	17,758	980	50,346	135,136
Natural Gasoline and Isopentane	6,321	0	240	267	0	0	5,927	0	901	6,118
Unfractionated Stream	-1,563	0	0	1,563	0	0	0	0	0	10,112
Plant Condensate	851	0	193	-55	0	0	987	0	2	507
Liquefied Petroleum Gases	43,164	10,361	5,398	2,345	0	0	10,844	980	49,444	118,399
Ethane	8,659	711	1,690	-470	0	0	81	(s)	10,509	7,605
Propane	15,381	8,413	1,250	1,046	0	0	129	551	25,410	60,518
Butane	6,542	1,082	1,595	3,286	0	0	6,827	429	5,249	23,223
Butane-Propane Mixtures	147	88	292	81	0	0	260	0	348	1,758
Ethane-Propane Mixtures	9,206	0	571	-1,908	0	0	0	0	7,869	14,754
Isobutane	3,229	67	0	310	0	0	3,547	0	59	10,541
Other Liquids	1,492	0	9,226	3,850	0	0	20,446	0	-5,878	149,473
Other Hydrocarbons and Alcohol	1,492	0	0	101	0	0	1,593	0	0	282
Unfinished Oils	0	0	7,689	3,126	0	0	14,179	0	-3,364	108,994
Motor Gasoline Blending Components	0	0	1,537	587	0	0	4,638	0	-2,514	39,910
Aviation Gasoline Blending Components	0	0	0	36	0	0	36	0	0	287
Finished Petroleum Products	315	404,280	40,639	-11,814	0	0	0	13,832	419,588	512,890
Finished Motor Gasoline	60	199,014	8,063	-8,209	0	0	0	66	198,862	196,036
Finished Leaded Motor Gasoline	41	86,262	3,820	-2,628	0	0	0	66	87,429	96,400
Finished Unleaded Motor Gasoline	19	112,752	4,243	-5,581	0	0	0	0	111,433	99,636
Finished Aviation Gasoline	104	604	1	31	0	0	0	0	740	2,410
Naphtha-Type Jet Fuel	0	6,095	0	-518	0	0	0	0	5,577	6,642
Kerosene-Type Jet Fuel	0	26,190	550	-1,978	0	0	0	373	24,389	39,246
Kerosene	3	3,867	723	-12	0	0	0	2	4,579	10,219
Distillate Fuel Oil	0	80,376	5,663	1,946	0	0	0	1,614	86,371	161,339
Residual Fuel Oil	0	25,454	23,317	-3,042	0	0	0	4,998	40,731	54,462
Naphtha < 400 Deg. for Petro. Feed. Use	0	3,885	627	115	0	0	0	175	4,452	1,797
Other Oils > 400 Deg. for Petro. Feed. Use	0	7,952	0	-78	0	0	0	516	7,358	2,004
Special Naphthas	90	1,763	1,264	405	0	0	0	54	3,468	3,079
Lubricants	0	5,167	202	-849	0	0	0	402	4,118	11,485
Waxes	0	503	30	-45	0	0	0	24	463	790
Petroleum Coke	0	13,715	0	44	0	0	0	5,556	8,203	5,506
Asphalt and Road Oil	0	9,891	20	592	0	0	0	14	10,489	15,758
Still Gas	0	17,535	0	0	0	0	0	0	17,535	0
Miscellaneous Products	58	2,269	180	-216	0	0	0	38	2,253	2,117
Total	309,288	414,641	155,047	1,605	4,112	48	398,281	20,379	465,985	1,510,273

[1] Unaccounted for crude oil is a balancing item.
(s) Less than 500 barrels.
E = Estimated.
Note: Total may not equal sum of components due to independent rounding.
Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 3. Year-to-Date Supply and Disposition of Crude Oil and Petroleum Products, January - November 1983
(Thousand Barrels)

Commodity	Supply					Disposition				
	Field Production	Refinery Production	Imports	Stock Withdrawal (+) or Addition (-)	Unaccounted For Crude Oil[1]	Crude Losses	Refinery Inputs	Exports	Products Supplied	Ending Stocks
Crude Oil (including lease condensate)	E 2,892,395	0	1,105,778	-68,903	62,218	494	3,912,416	57,011	21,568	712,774
Natural Gas Liquids and LRGs	519,165	109,325	66,400	-20,950	0	0	152,375	24,730	496,835	135,136
Natural Gasoline and Isopentane	81,363	0	2,359	-131	0	0	61,104	0	22,487	6,118
Unfractionated Stream	6,242	0	0	-6,073	0	0	169	0	0	10,112
Plant Condensate	7,097	0	2,288	935	0	0	10,298	0	22	507
Liquefied Petroleum Gases	424,463	109,325	61,754	-15,681	0	0	80,804	24,730	474,326	118,399
Ethane	86,285	5,452	15,131	-1,634	0	0	870	31	104,334	7,605
Propane	149,100	89,601	14,161	-2,281	0	0	1,393	14,735	234,453	60,518
Butane	68,498	12,768	15,439	-6,541	0	0	46,992	9,964	33,207	23,223
Butane-Propane Mixtures	1,787	1,215	5,709	367	0	0	2,653	0	6,425	1,758
Ethane-Propane Mixtures	87,340	0	11,313	-3,472	0	0	48	0	95,133	14,754
Isobutane	31,453	289	0	-2,120	0	0	28,848	0	774	10,541
Other Liquids	17,853	0	87,987	-1,651	0	0	160,624	0	-56,435	149,473
Other Hydrocarbons and Alcohol	17,853	0	0	29	0	0	17,882	0	0	282
Unfinished Oils	0	0	76,964	-3,717	0	0	101,691	0	-28,444	108,994
Motor Gasoline Blending Components	0	0	11,022	1,832	0	0	40,363	0	-27,509	39,910
Aviation Gasoline Blending Components	0	0	1	205	0	0	688	0	-482	287
Finished Petroleum Products	4,013	4,277,760	406,034	43,248	0	0	0	168,310	4,562,746	512,890
Finished Motor Gasoline	727	2,114,725	84,166	6,501	0	0	0	2,968	2,203,151	196,036
Finished Leaded Motor Gasoline	493	948,075	44,040	5,755	0	0	0	2,968	995,395	96,400
Finished Unleaded Motor Gasoline	234	1,166,650	40,126	746	0	0	0	0	1,207,756	99,636
Finished Aviation Gasoline	1,125	7,492	213	-96	0	0	0	0	8,734	2,410
Naphtha-Type Jet Fuel	0	68,363	0	547	0	0	0	201	68,709	6,642
Kerosene-Type Jet Fuel	1	274,799	9,105	-7,245	0	0	0	1,496	275,164	39,246
Kerosene	37	36,005	3,029	573	0	0	0	294	39,350	10,219
Distillate Fuel Oil	11	817,283	55,063	24,240	0	0	0	21,727	874,871	161,339
Residual Fuel Oil	0	281,277	231,584	13,767	0	0	0	63,126	463,502	54,462
Naphtha < 400 Deg. for Petro. Feed. Use	0	46,879	4,337	170	0	0	0	1,666	49,720	1,797
Other Oils > 400 Deg. for Petro. Feed. Use	0	86,967	181	176	0	0	0	4,962	82,362	2,004
Special Naphthas	1,069	18,573	7,620	395	0	0	0	1,003	26,654	3,079
Lubricants	0	49,059	2,648	1,696	0	0	0	5,289	48,114	11,485
Waxes	0	5,034	273	-4	0	0	0	255	5,048	790
Petroleum Coke	0	139,688	0	1,215	0	0	0	64,729	76,174	5,506
Asphalt and Road Oil	0	128,224	2,414	1,511	0	0	0	255	131,894	15,758
Still Gas	0	184,127	0	0	0	0	0	0	184,127	0
Miscellaneous Products	1,043	19,265	5,400	-198	0	0	0	339	25,171	2,117
Total	3,433,426	4,387,085	1,666,200	-48,256	62,218	494	4,225,415	250,051	5,024,713	1,510,273

1 Unaccounted for crude oil is a balancing item.
(s) Less than 500 barrels.
E = Estimated.
Note: Total may not equal sum of components due to independent rounding.
Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 4. Daily Average Supply and Disposition of Crude Oil and Petroleum Products, November 1983
(Thousand Barrels per Day)

Commodity	Supply					Disposition			
	Field Production	Refinery Production	Imports	Stock Withdrawal (+) or Addition (-)	Unaccounted For Crude Oil[1]	Crude Losses	Refinery Inputs	Exports	Products Supplied
Crude Oil (including lease condensate)	E 8,624	0	3,312	182	137	2	12,003	186	64
Natural Gas Liquids and LRGs	1,626	345	194	137	0	0	592	33	1,678
Natural Gasoline and Isopentane	211	0	8	9	0	0	198	0	30
Unfractionated Stream	-52	0	0	52	0	0	0	0	0
Plant Condensate	28	0	6	-2	0	0	33	0	(s)
Liquefied Petroleum Gases	1,439	345	180	78	0	0	361	33	1,648
Ethane	289	24	56	-16	0	0	3	(s)	350
Propane	513	280	42	35	0	0	4	18	847
Butane	218	36	53	110	0	0	228	14	175
Butane-Propane Mixtures	5	3	10	3	0	0	9	0	12
Ethane-Propane Mixtures	307	0	19	-64	0	0	0	0	262
Isobutane	108	2	0	10	0	0	118	0	2
Other Liquids	50	0	308	128	0	0	682	0	-196
Other Hydrocarbons and Alcohol	50	0	0	3	0	0	53	0	0
Unfinished Oils	0	0	256	104	0	0	473	0	-112
Motor Gasoline Blending Components	0	0	51	20	0	0	155	0	-84
Aviation Gasoline Blending Components	0	0	0	1	0	0	1	0	0
Finished Petroleum Products	11	13,476	1,355	-394	0	0	0	461	13,986
Finished Motor Gasoline	2	6,634	269	-274	0	0	0	2	6,629
Finished Leaded Motor Gasoline	1	2,875	127	-88	0	0	0	2	2,914
Finished Unleaded Motor Gasoline	1	3,758	141	-186	0	0	0	0	3,714
Finished Aviation Gasoline	3	20	(s)	1	0	0	0	0	25
Naphtha-Type Jet Fuel	0	203	0	-17	0	0	0	0	186
Kerosene-Type Jet Fuel	0	873	18	-66	0	0	0	12	813
Kerosene	(s)	129	24	(s)	0	0	0	(s)	153
Distillate Fuel Oil	0	2,679	189	65	0	0	0	54	2,879
Residual Fuel Oil	0	848	777	-101	0	0	0	167	1,358
Naphtha < 400 Deg. for Petro. Feed. Use	0	130	21	4	0	0	0	6	148
Other Oils > 400 Deg. for Petro. Feed. Use	0	265	0	-3	0	0	0	17	245
Special Naphthas	3	59	42	14	0	0	0	2	116
Lubricants	0	172	7	-28	0	0	0	13	137
Waxes	0	17	1	-2	0	0	0	1	15
Petroleum Coke	0	457	0	1	0	0	0	185	273
Asphalt and Road Oil	0	330	1	20	0	0	0	(s)	350
Still Gas	0	585	0	0	0	0	0	0	585
Miscellaneous Products	2	76	6	-7	0	0	0	1	75
Total	10,310	13,821	5,168	54	137	2	13,276	679	15,533

[1] Unaccounted for crude oil is a balancing item.
(s) Less than 500 barrels.
E = Estimated.
Note: Total may not equal sum of components due to independent rounding.
Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 5. Year-to-Date Daily Average Supply and Disposition of Crude Oil and Petroleum Products, January - November 1983
(Thousand Barrels per Day)

Commodity	Supply					Disposition			
	Field Production	Refinery Production	Imports	Stock Withdrawal (+) or Addition (-)	Unaccounted For Crude Oil[1]	Crude Losses	Refinery Inputs	Exports	Products Supplied
Crude Oil (including lease condensate)	E 8,660	0	3,311	-206	186	1	11,714	171	65
Natural Gas Liquids and LRGs	1,554	327	199	-63	0	0	456	74	1,488
Natural Gasoline and Isopentane	244	0	7	(s)	0	0	183	0	67
Unfractionated Stream	19	0	0	-18	0	0	1	0	0
Plant Condensate	21	0	7	3	0	0	31	0	(s)
Liquefied Petroleum Gases	1,271	327	185	-47	0	0	242	74	1,420
Ethane	258	16	45	-5	0	0	3	(s)	312
Propane	446	268	42	-7	0	0	4	44	702
Butane	205	38	46	-20	0	0	141	30	99
Butane-Propane Mixtures	5	4	17	1	0	0	8	0	19
Ethane-Propane Mixtures	261	0	34	-10	0	0	(s)	0	285
Isobutane	94	1	0	-6	0	0	86	0	2
Other Liquids	53	0	263	-5	0	0	481	0	-169
Other Hydrocarbons and Alcohol	53	0	0	(s)	0	0	54	0	0
Unfinished Oils	0	0	230	-11	0	0	304	0	-85
Motor Gasoline Blending Components	0	0	33	5	0	0	121	0	-82
Aviation Gasoline Blending Components	0	0	(s)	1	0	0	2	0	-1
Finished Petroleum Products	12	12,808	1,216	129	0	0	0	504	13,661
Finished Motor Gasoline	2	6,332	252	19	0	0	0	9	6,596
Finished Leaded Motor Gasoline	1	2,839	132	17	0	0	0	9	2,980
Finished Unleaded Motor Gasoline	1	3,493	120	2	0	0	0	0	3,616
Finished Aviation Gasoline	3	22	1	(s)	0	0	0	0	26
Naphtha-Type Jet Fuel	0	205	0	2	0	0	0	1	206
Kerosene-Type Jet Fuel	(s)	823	27	-22	0	0	0	4	824
Kerosene	(s)	108	9	2	0	0	0	1	118
Distillate Fuel Oil	(s)	2,447	165	73	0	0	0	65	2,619
Residual Fuel Oil	0	842	693	41	0	0	0	189	1,388
Naphtha < 400 Deg. for Petro. Feed. Use	0	140	13	1	0	0	0	5	149
Other Oils > 400 Deg. for Petro. Feed. Use	0	260	1	1	0	0	0	15	247
Special Naphthas	3	56	23	1	0	0	0	3	80
Lubricants	0	147	8	5	0	0	0	16	144
Waxes	0	15	1	(s)	0	0	0	1	15
Petroleum Coke	0	418	0	4	0	0	0	194	228
Asphalt and Road Oil	0	384	7	5	0	0	0	1	395
Still Gas	0	551	0	0	0	0	0	0	551
Miscellaneous Products	3	58	16	-1	0	0	0	1	75
Total	10,280	13,135	4,989	-144	186	1	12,651	749	15,044

[1] Unaccounted for crude oil is a balancing item.
(s) Less than 500 barrels.
E = Estimated.
Note: Total may not equal sum of components due to independent rounding.
Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 6. PAD District I, Supply and Disposition of Crude Oil and Petroleum Products, November 1983
(Thousand Barrels)

Commodity	Supply						Disposition				Ending Stocks
	Field Production	Refinery Production	Imports	Stock Withdrawal (+) or Addition (-)	Unaccounted For Crude Oil[1]	Net Receipts	Crude Losses	Refinery Inputs	Exports	Products Supplied	
Crude Oil (including lease condensate)	E 2,244	0	21,995	1,037	-664	2,605	0	27,217	0	0	14,233
Natural Gas Liquids and LRGs	893	1,036	857	353	0	2,732	0	487	25	5,359	5,813
Liquefied Petroleum Gases	646	1,036	576	356	0	2,732	0	345	25	4,975	5,775
Other Products[2]	247	0	281	-3	0	0	0	142	0	383	38
Other Liquids	15	0	2,805	1,432	0	-51	0	6,101	0	-1,900	19,073
Other Hydrocarbons and Alcohol	15	0	0	67	0	0	0	82	0	0	58
Unfinished Oils	0	0	2,225	1,278	0	-159	0	5,181	0	-1,837	14,436
Motor Gasoline Blending Components	0	0	579	75	0	108	0	826	0	-64	4,579
Aviation Gasoline Blending Components	0	0	0	12	0	0	0	12	0	0	0
Finished Petroleum Products	53	34,361	35,534	-3,181	0	75,266	0	0	376	141,657	185,990
Finished Motor Gasoline	53	16,624	7,416	-1,880	0	44,994	0	0	2	67,205	58,980
Finished Leaded Motor Gasoline	34	5,812	3,436	1,079	0	15,604	0	0	2	25,963	27,388
Finished Unleaded Motor Gasoline	19	10,812	3,980	-2,959	0	29,390	0	0	0	41,242	31,592
Finished Aviation Gasoline	0	13	1	0	0	190	0	0	0	204	449
Naphtha-Type Jet Fuel	0	633	0	-36	0	678	0	0	0	1,275	641
Kerosene-Type Jet Fuel	0	453	410	-910	0	9,232	0	0	122	9,063	10,969
Kerosene	0	463	723	-349	0	623	0	0	(s)	1,460	4,537
Distillate Fuel Oil	0	7,155	4,871	3,775	0	16,130	0	0	1	31,930	70,839
Residual Fuel Oil	0	2,876	20,946	-4,042	0	1,863	0	0	(s)	21,643	29,338
Naphtha and Other Oils for Petro. Feed.	0	309	249	-55	0	23	0	0	62	464	94
Special Naphthas	0	36	754	77	0	327	0	0	3	1,191	766
Lubricants	0	828	126	-426	0	742	0	0	124	1,147	3,339
Waxes	0	92	18	0	0	0	0	0	4	106	159
Petroleum Coke	0	1,020	0	-70	0	0	0	0	36	914	1,162
Asphalt and Road Oil	0	2,027	16	833	0	264	0	0	7	3,133	4,286
Still Gas	0	1,647	0	0	0	0	0	0	0	1,647	0
Miscellaneous Products	0	185	4	-98	0	200	0	0	16	275	431
Total	3,205	35,397	61,190	-359	-664	80,552	0	33,805	401	145,115	225,109

1 Unaccounted for crude oil is a balancing item.
2 Includes natural gasoline, isopentane, unfractionated stream, and plant condensate.
(s) Less than 500 barrels.
E Estimated.
Note: Total may not equal sum of components due to independent rounding.
Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 7. PAD District II, Supply and Disposition of Crude Oil and Petroleum Products, November 1983
(Thousand Barrels)

Commodity	Supply						Disposition				Ending Stocks
	Field Production	Refinery Production	Imports	Stock Withdrawal (+) or Addition (-)	Unaccounted For Crude Oil[1]	Net Receipts	Crude Losses	Refinery Inputs	Exports	Products Supplied	
Crude Oil (including lease condensate)	E 31,320	0	18,866	738	32,259	1,970	0	84,905	248	0	73,553
Natural Gas Liquids and LRGs	9,926	2,338	3,811	943	0	5,159	0	6,160	11	16,006	42,091
Liquefied Petroleum Gases	10,038	2,338	3,811	531	0	3,549	0	4,425	11	15,831	36,809
Other Products[2]	-112	0	0	412	0	1,610	0	1,735	0	175	5,282
Other Liquids	378	0	261	132	0	1,260	0	2,389	0	-358	25,936
Other Hydrocarbons and Alcohol	378	0	0	17	0	0	0	395	0	0	119
Unfinished Oils	0	0	212	116	0	9	0	696	0	-359	18,169
Motor Gasoline Blending Components	0	0	49	-27	0	1,251	0	1,272	0	1	7,564
Aviation Gasoline Blending Components	0	0	0	26	0	0	0	26	0	0	84
Finished Petroleum Products	7	94,629	799	-5,173	0	21,752	0	0	389	111,626	129,811
Finished Motor Gasoline	0	53,893	67	-3,125	0	12,677	0	0	0	63,512	60,849
Finished Leaded Motor Gasoline	0	25,558	51	-2,096	0	6,135	0	0	0	29,648	31,009
Finished Unleaded Motor Gasoline	0	28,335	15	-1,029	0	6,542	0	0	0	33,863	29,840
Finished Aviation Gasoline	0	112	0	-42	0	115	0	0	0	185	601
Naphtha-Type Jet Fuel	0	923	0	90	0	142	0	0	0	1,155	1,663
Kerosene-Type Jet Fuel	0	4,015	0	-218	0	1,662	0	0	0	5,459	8,222
Kerosene	0	805	0	193	0	46	0	0	1	1,043	2,197
Distillate Fuel Oil	0	20,277	252	-1,953	0	6,609	0	0	1	25,184	42,724
Residual Fuel Oil	0	2,095	346	184	0	-332	0	0	0	2,293	3,635
Naphtha and Other Oils for Petro. Feed.	0	866	18	-22	0	9	0	0	35	836	235
Special Naphthas	0	495	33	65	0	197	0	0	4	786	597
Lubricants	0	762	12	-95	0	282	0	0	22	939	2,076
Waxes	0	45	3	1	0	0	0	0	1	48	76
Petroleum Coke	0	3,250	0	41	0	0	0	0	318	2,973	626
Asphalt and Road Oil	0	3,413	3	-281	0	273	0	0	4	3,403	6,085
Still Gas	0	3,515	0	0	0	0	0	0	0	3,515	0
Miscellaneous Products	7	163	64	-11	0	72	0	0	2	293	225
Total	41,631	96,967	23,738	-3,360	32,259	30,141	0	93,454	648	127,274	271,391

1 Unaccounted for crude oil is a balancing item.
2 Includes natural gasoline, isopentane, unfractionated stream, and plant condensate.
(s) Less than 500 barrels.
E Estimated.
Note: Total may not equal sum of components due to independent rounding.
Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 8. PAD District III, Supply and Disposition of Crude Oil and Petroleum Products, November 1983
(Thousand Barrels)

Commodity	Supply						Disposition				Ending Stocks
	Field Production	Refinery Production	Imports	Stock Withdrawal (+) or Addition (-)	Unaccounted For Crude Oil[1]	Net Receipts	Crude Losses	Refinery Inputs	Exports	Products Supplied	
Crude Oil (including lease condensate)	E 124,098	0	52,401	3,550	-25,029	16,381	27	171,342	0	32	528,630
Natural Gas Liquids and LRGs	34,470	6,000	293	2,539	0	-6,477	0	9,802	728	26,295	82,758
Liquefied Petroleum Gases	30,885	6,000	293	1,184	0	-6,177	0	5,133	728	26,324	71,966
Other Products[2]	3,585	0	0	1,355	0	-300	0	4,669	0	-29	10,792
Other Liquids	603	0	5,609	2,330	0	-1,209	0	11,957	0	-4,624	67,995
Other Hydrocarbons and Alcohol	603	0	0	16	0	0	0	619	0	0	101
Unfinished Oils	0	0	5,189	2,233	0	150	0	8,643	0	-1,071	48,873
Motor Gasoline Blending Components	0	0	420	89	0	-1,359	0	2,703	0	-3,553	18,838
Aviation Gasoline Blending Components	0	0	0	-8	0	0	0	-8	0	0	183
Finished Petroleum Products	245	194,294	2,982	-1,158	0	-100,073	0	0	6,901	89,389	132,261
Finished Motor Gasoline	0	92,034	199	-2,106	0	-59,510	0	0	61	30,556	51,150
Finished Leaded Motor Gasoline	0	37,880	199	-839	0	-22,676	0	0	61	14,503	25,254
Finished Unleaded Motor Gasoline	0	54,154	0	-1,267	0	-36,834	0	0	0	16,053	25,896
Finished Aviation Gasoline	104	383	0	8	0	-305	0	0	0	190	829
Naphtha-Type Jet Fuel	0	2,690	0	-577	0	-931	0	0	0	1,182	2,349
Kerosene-Type Jet Fuel	0	14,674	57	-543	0	-11,490	0	0	206	2,492	12,847
Kerosene	3	2,526	0	27	0	-669	0	0	(s)	1,887	3,094
Distillate Fuel Oil	0	38,303	257	830	0	-23,010	0	0	505	15,875	33,778
Residual Fuel Oil	0	10,820	1,487	1,117	0	-1,742	0	0	2,324	9,358	12,452
Naphtha and Other Oils for Petro. Feed.	0	9,842	360	293	0	-32	0	0	531	9,931	2,765
Special Naphthas	90	1,171	464	224	0	-596	0	0	45	1,309	1,460
Lubricants	0	3,179	42	-337	0	-1,024	0	0	178	1,682	4,800
Waxes	0	294	7	-47	0	0	0	0	15	238	503
Petroleum Coke	0	5,896	0	-139	0	0	0	0	3,021	2,736	1,648
Asphalt and Road Oil	0	2,396	0	233	0	-537	0	0	(s)	2,092	3,341
Still Gas	0	8,366	0	0	0	0	0	0	0	8,366	0
Miscellaneous Products	48	1,720	109	-141	0	-227	0	0	15	1,494	1,245
Total	159,416	200,294	61,285	7,261	-25,029	-91,378	27	193,101	7,629	111,092	811,644

1 Unaccounted for crude oil is a balancing item.
2 Includes natural gasoline, isopentane, unfractionated stream, and plant condensate.
(s) Less than 500 barrels.
E Estimated.
Note: Total may not equal sum of components due to independent rounding.
Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 9. PAD District IV, Supply and Disposition of Crude Oil and Petroleum Products, November 1983
(Thousand Barrels)

Commodity	Supply						Disposition				Ending Stocks
	Field Production	Refinery Production	Imports	Stock Withdrawal (+) or Addition (-)	Unaccounted For Crude Oil[1]	Net Receipts	Crude Losses	Refinery Inputs	Exports	Products Supplied	
Crude Oil (including lease condensate)	E 16,245	0	1,257	-277	-4,112	0	0	13,106	0	7	13,166
Natural Gas Liquids and LRGs	2,541	90	549	9	0	-1,414	0	541	0	1,234	1,150
Liquefied Petroleum Gases	1,010	90	398	9	0	-104	0	383	0	1,020	560
Other Products[2]	1,531	0	151	0	0	-1,310	0	158	0	214	590
Other Liquids	0	0	62	-38	0	0	0	-466	0	490	4,815
Other Hydrocarbons and Alcohol	0	0	0	0	0	0	0	0	0	0	0
Unfinished Oils	0	0	62	310	0	0	0	-185	0	557	2,845
Motor Gasoline Blending Components	0	0	0	-348	0	0	0	-281	0	-67	1,970
Aviation Gasoline Blending Components	0	0	0	0	0	0	0	0	0	0	0
Finished Petroleum Products	10	13,462	149	-1,084	0	222	0	0	2	12,757	10,520
Finished Motor Gasoline	7	6,796	42	-738	0	190	0	0	0	6,297	5,403
Finished Leaded Motor Gasoline	7	4,287	42	-540	0	-94	0	0	0	3,702	3,458
Finished Unleaded Motor Gasoline	0	2,509	1	-198	0	284	0	0	0	2,596	1,945
Finished Aviation Gasoline	0	28	0	2	0	0	0	0	0	30	58
Naphtha-Type Jet Fuel	0	385	0	53	0	-174	0	0	0	264	298
Kerosene-Type Jet Fuel	0	562	0	59	0	431	0	0	0	1,052	707
Kerosene	0	42	0	-12	0	0	0	0	0	30	39
Distillate Fuel Oil	0	3,767	78	-189	0	-225	0	0	0	3,431	2,821
Residual Fuel Oil	0	338	28	-3	0	0	0	0	0	363	455
Naphtha and Other Oils for Petro. Feed.	0	1	0	-1	0	0	0	0	(s)	(s)	6
Special Naphthas	0	4	(s)	-3	0	0	0	0	0	1	11
Lubricants	0	35	(s)	-12	0	0	0	0	1	22	65
Waxes	0	7	0	0	0	0	0	0	0	7	0
Petroleum Coke	0	306	0	10	0	0	0	0	0	316	123
Asphalt and Road Oil	0	637	0	-248	0	0	0	0	1	388	527
Still Gas	0	516	0	0	0	0	0	0	0	516	0
Miscellaneous Products	3	38	(s)	-2	0	0	0	0	0	39	7
Total	18,796	13,552	2,016	-1,390	-4,112	-1,192	0	13,181	2	14,487	29,651

1 Unaccounted for crude oil is a balancing item.
2 Includes natural gasoline, isopentane, unfractionated stream, and plant condensate.
(s) Less than 500 barrels.
E Estimated.
Note: Total may not equal sum of components due to independent rounding.
Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 10. PAD District V, Supply and Disposition of Crude Oil and Petroleum Products, November 1983
(Thousand Barrels)

Commodity	Supply						Disposition				Ending Stocks
	Field Production	Refinery Production	Imports	Stock Withdrawal (+) or Addition (-)	Unaccounted For Crude Oil[1]	Net Receipts	Crude Losses	Refinery Inputs	Exports	Products Supplied	
Crude Oil (including lease condensate)	E 84,801	0	4,834	401	1,657	-20,956	21	63,507	5,319	1,890	83,192
Natural Gas Liquids and LRGs	943	897	320	276	0	0	0	768	215	1,453	3,324
Liquefied Petroleum Gases	585	897	320	265	0	0	0	558	215	1,294	3,289
Other Products[2]	358	0	0	11	0	0	0	210	0	159	35
Other Liquids	496	0	489	-6	0	0	0	465	0	514	31,654
Other Hydrocarbons and Alcohol	496	0	0	1	0	0	0	497	0	0	4
Unfinished Oils	0	0	1	-811	0	0	0	-156	0	-654	24,671
Motor Gasoline Blending Components	0	0	488	798	0	0	0	118	0	1,168	6,959
Aviation Gasoline Blending Components	0	0	0	6	0	0	0	6	0	0	20
Finished Petroleum Products	0	67,534	1,175	-1,218	0	2,833	0	0	6,165	64,160	54,308
Finished Motor Gasoline	0	29,667	338	-360	0	1,649	0	0	3	31,291	19,654
Finished Leaded Motor Gasoline	0	12,725	92	-232	0	1,031	0	0	3	13,613	9,291
Finished Unleaded Motor Gasoline	0	16,942	246	-128	0	618	0	0	0	17,678	10,363
Finished Aviation Gasoline	0	68	0	63	0	0	0	0	0	131	473
Naphtha-Type Jet Fuel	0	1,464	0	-48	0	285	0	0	0	1,701	1,691
Kerosene-Type Jet Fuel	0	6,486	84	-366	0	165	0	0	45	6,324	6,501
Kerosene	0	31	0	129	0	0	0	0	1	159	352
Distillate Fuel Oil	0	10,874	205	-517	0	496	0	0	1,108	9,950	11,177
Residual Fuel Oil	0	9,325	509	-298	0	211	0	0	2,674	7,074	8,582
Naphtha and Other Oils for Petro. Feed.	0	819	0	-178	0	0	0	0	63	578	701
Special Naphthas	0	57	12	42	0	72	0	0	2	181	245
Lubricants	0	363	21	21	0	0	0	0	77	328	1,205
Waxes	0	65	2	1	0	0	0	0	4	64	52
Petroleum Coke	0	3,243	0	202	0	0	0	0	2,182	1,263	1,947
Asphalt and Road Oil	0	1,418	1	55	0	0	0	0	1	1,473	1,519
Still Gas	0	3,491	0	0	0	0	0	0	0	3,491	0
Miscellaneous Products	0	163	2	36	0	-45	0	0	4	152	209
Total	86,240	68,431	6,818	-547	1,657	-18,123	21	64,740	11,698	68,017	172,478

1 Unaccounted for crude oil is a balancing item.
2 Includes natural gasoline, isopentane, unfractionated stream, and plant condensate.
(s) Less than 500 barrels.
E Estimated.
Note: Total may not equal sum of components due to independent rounding.
Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 11. Production of Crude Oil (including Lease Condensate) by PAD District and State, for the Most Currently Available Month,[1] September 1983 (Thousand Barrels)

PAD District and State	Production	
	Total	Daily Average
PAD District I		
Florida	1,561	52
New York	E 68	E 2
Pennsylvania	E 352	E 12
Virginia	E 4	E 0
West Virginia	333	11
Adjustment [2]	34	1
Total PAD District I	E 2,352	E 78
PAD District II		
Illinois	2,460	82
Indiana	408	14
Kansas	5,967	199
Kentucky	647	22
Michigan	E 2,662	E 89
Missouri	E 17	E 1
Nebraska	532	18
North Dakota	4,164	139
Ohio	E 1,197	E 40
Oklahoma	13,049	435
South Dakota	100	3
Tennessee	80	3
Adjustment [2]	184	6
Total PAD District II	E 31,467	E 1,049
PAD District III		
Alabama	1,435	48
Arkansas	E 1,549	E 52
Louisiana		
Gulf Coast	37,913	1,264
Rest of State	2,810	94
Total Louisiana	40,723	1,357
Mississippi	2,607	87
New Mexico		
Northwestern	536	18
Southeastern	5,693	190
Total New Mexico	6,229	208
Texas		
TRRC District 01	1,999	67
TRRC District 02	3,321	111
TRRC District 03	10,282	343
TRRC District 04	2,261	75
TRRC District 05	791	26
TRRC District 06, excluding East Texas	3,496	117
TRRC District 07B	2,795	93
TRRC District 07C	2,824	94
TRRC District 08	18,829	628
TRRC District 08A	18,415	614
TRRC District 09	3,171	106
TRRC District 10	1,704	57
East Texas	4,168	139
Total Texas	74,056	2,469
Adjustment [2]	-2,144	-71
Total PAD District III	E 124,455	E 4,148

—Continued

PAD District and State	Production	
	Total	Daily Average
PAD District IV		
Colorado	2,528	84
Montana	2,324	77
Utah	E 2,367	E 79
Wyoming	E 9,297	E 310
Adjustment [2]	83	3
Total PAD District IV	E 16,599	E 553
PAD District V		
Alaska		
South Alaska	2,015	67
North Slope	50,111	1,670
Adjustment for Alaska[2]	-463	-15
Total Alaska	51,663	1,722
Arizona	20	1
California		
Central Coastal	E 6,145	E 205
East Central	E 20,891	E 696
North	E 15	E 1
South	E 6,510	E 217
Total California	33,561	1,119
Nevada	71	2
Adjustment for Arizona, California, and Nevada[2]	-214	-7
Total PAD District V	85,101	2,837
United States Total	E 259,974	E 8,666

[1] Includes the following offshore production (thousands of barrels):
Alaska: 2,001;
California: Federal- 2,486, State- 3,140;
Louisiana: Federal- 25,860, State- 2,149;
Texas: Federal- 1,593, State- 217;
U.S. Total- 37,446.

[2] These adjustments are used to reconcile the national and PADD level sums of the State data with the independently estimated U.S. and Alaskan figures shown in the Summary Statistics portion of this issue and with the PADD level figures published in a previous issue. Final data at the State, PAD District and national levels will be published without adjustments in the Petroleum Supply Annual.

Note: Total may not equal sum of components due to independent rounding.
Sources: See Explanatory Notes on Data Collection and Estimation.
E = Estimated.
– Data not available.

See footnotes at end of table.

Table 12. Natural Gas Processing Plant Production of Petroleum Products by PAD District,[1] November 1983
(Thousand Barrels)

Commodity	PAD District I			PAD District II					PAD District III						PAD Dist. IV	PAD Dist. V	United States
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Daks.	Okla., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	New Mexico	Total	Rocky Mt.	West Coast	
Natural Gas Liquids	384	509	893	2	1,803	503	7,618	9,926	19,727	2,853	7,477	716	3,697	34,470	2,541	943	46,773
Natural Gasoline and Isopentane	55	44	99	0	78	77	1,492	1,647	1,445	611	1,366	120	304	3,846	356	373	6,321
Unfractionated Stream	0	148	148	2	563	99	-2,528	-1,864	11,365	-14,687	99	45	2,295	-883	1,051	-15	-1,563
Plant Condensate	0	0	0	0	30	25	50	105	210	347	39	21	5	622	124	0	851
Liquefied Petroleum Gases	329	317	646	0	1,132	302	8,604	10,038	6,707	16,582	5,973	530	1,093	30,885	1,010	585	43,164
Ethane	96	168	264	0	470	0	863	1,333	944	3,905	2,062	38	96	7,045	17	0	8,659
Propane	147	99	246	0	509	190	3,147	3,846	2,605	4,997	1,985	161	484	10,232	708	349	15,381
Butane	72	33	105	0	96	98	1,298	1,492	935	2,383	697	207	250	4,472	280	193	6,542
Butane-Propane Mixtures	0	0	0	0	0	0	6	6	53	43	1	12	0	109	0	32	147
Ethane-Propane Mixtures	0	0	0	0	0	0	2,788	2,788	1,962	3,675	594	5	182	6,418	0	0	9,206
Isobutane	14	17	31	0	57	14	502	573	208	1,579	634	107	81	2,609	5	11	3,229
Finished Petroleum Products	53	0	53	0	3	0	4	7	229	6	1	7	2	245	10	0	315
Finished Motor Gasoline	53	0	53	0	0	0	0	0	0	0	0	0	0	0	7	0	60
Finished Leaded Motor Gasoline	34	0	34	0	0	0	0	0	0	0	0	0	0	0	7	0	41
Finished Unleaded Motor Gasoline	19	0	19	0	0	0	0	0	0	0	0	0	0	0	0	0	19
Finished Aviation Gasoline	0	0	0	0	0	0	0	0	104	0	0	0	0	104	0	0	104
Naphtha-Type Jet Fuel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Kerosene-Type Jet Fuel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Kerosene	0	0	0	0	0	0	0	0	1	0	0	0	2	3	0	0	3
Distillate Fuel Oil	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Special Naphthas	0	0	0	0	0	0	0	0	90	0	0	0	0	90	0	0	90
Miscellaneous Products	0	0	0	0	3	0	4	7	34	6	1	7	0	48	3	0	58
Total Production	437	509	946	2	1,806	503	7,622	9,933	19,956	2,859	7,478	723	3,699	34,715	2,551	943	49,088

1 Production represents quantity of natural gas processing plant output less input to fractionating facilities.
Source: See Explanatory Notes on Data Collection and Estimation.

Table 13. Refinery Input of Crude Oil and Petroleum Products by PAD District, November 1983
(Thousand Barrels, Except Where Noted)

Commodity	PAD District I			PAD District II					PAD District III						PAD Dist. IV	PAD Dist. V	United States
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Daks.	Okla., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	New Mexico	Total	Rocky Mt.	West Coast	
Crude Oil (including lease condensate)	24,732	2,485	27,217	1,879	55,610	8,532	18,884	84,905	14,731	89,394	59,771	5,268	2,178	171,342	13,106	63,507	360,077
Natural Gas Liquids																	
Natural Gasoline and Isopentane	142	0	142	0	458	236	944	1,638	1,138	1,925	576	83	102	3,824	113	210	5,927
Unfractionated Stream	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Plant Condensate	0	0	0	0	84	0	13	97	0	658	6	181	0	845	45	0	987
Liquefied Petroleum Gases	287	58	345	181	2,495	510	1,239	4,425	861	2,049	2,013	151	59	5,133	383	558	10,844
Ethane	0	0	0	0	0	0	0	0	0	0	81	0	0	81	0	0	81
Propane	0	0	0	0	70	0	0	70	0	0	48	0	0	48	11	0	129
Butane	236	58	294	99	1,622	445	801	2,967	590	1,035	1,246	42	19	2,932	245	389	6,827
Butane-Propane Mixtures	0	0	0	0	7	26	0	33	0	55	53	0	18	126	80	21	260
Ethane-Propane Mixtures	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Isobutane	51	0	51	82	796	39	438	1,355	271	959	585	109	22	1,946	47	148	3,547
Other Liquids																	
Other Hydrocarbons and Alcohol	82	0	82	0	389	0	6	395	17	234	366	0	2	619	0	497	1,593
Unfinished Oil (net)	4,964	217	5,181	12	686	155	-157	696	279	7,355	707	253	49	8,643	-185	-156	14,179
Motor Gasoline Blending Components (net)	862	-36	826	4	1,229	-45	84	1,272	183	361	2,330	-73	-98	2,703	-281	118	4,638
Aviation Gasoline Blending Components (net)	12	0	12	0	7	0	19	26	0	-24	16	0	0	-8	0	6	36
Total Input to Refineries	31,081	2,724	33,805	2,076	60,958	9,388	21,032	93,454	17,209	101,952	65,785	5,863	2,292	193,101	13,181	64,740	398,281
Crude Oil Distillation																	
Gross Input (daily average)	921	83	1,004	69	1,880	305	644	2,899	505	3,069	2,007	177	73	5,831	437	2,111	12,282
Operable Capacity (daily average)	1,473	174	1,647	66	2,351	295	844	3,556	608	3,902	2,547	295	107	7,460	559	3,118	16,340
Operating Ratio (percent)[1]	62.5	47.5	60.9	104.6	80.0	103.3	76.4	81.5	83.0	78.6	78.8	59.9	68.1	78.2	78.2	67.7	75.2
Crude Oil Qualities																	
Sulfur Content, Weighted Average (percent)	1.00	.32	.94	.42	.91	1.49	.57	.88	.59	.91	.93	1.42	.70	.90	.94	1.01	.92
API Gravity, Weighted Average	31.39	41.03	32.27	37.36	35.82	30.24	37.63	35.69	37.73	35.23	33.61	32.75	39.33	34.85	36.20	25.38	33.20
Operable Capacity (daily average)	1,473	174	1,647	66	2,351	295	844	3,556	608	3,902	2,547	295	107	7,460	559	3,118	16,340
Operating	1,275	110	1,385	66	2,113	295	721	3,195	549	3,744	2,335	236	107	6,971	532	2,865	14,947
Idle	198	64	262	0	237	0	123	361	59	158	212	59	0	489	28	253	1,392

1. Represents gross input divided by operable capacity.
Note: Total may not equal sum of components due to independent rounding.
Source: See Explanatory Notes on Data Collection and Estimation.

Table 14. Refinery Production of Petroleum Products by PAD District, November 1983
(Thousand Barrels)

Commodity	PAD District I			PAD District II					PAD District III						PAD Dist. IV	PAD Dist. V	United States
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Daks.	Okla., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	New Mexico	Total	Rocky Mt.	West Coast	
Liquefied Refinery Gases	1,015	21	1,036	38	1,708	251	341	2,338	-36	3,045	2,826	86	79	6,000	90	897	10,361
For Petrochemical Feedstock Use	415	0	415	0	236	9	40	285	43	1,655	1,686	19	0	3,403	1	72	4,176
For Other Uses	600	21	621	38	1,472	242	301	2,053	-79	1,390	1,140	67	79	2,597	89	825	6,185
Ethane	0	0	0	0	0	0	0	0	0	699	12	0	0	711	0	0	711
For Petrochemical Feedstock Use	0	0	0	0	0	0	0	0	0	374	2	0	0	376	0	0	376
For Other Uses	0	0	0	0	0	0	0	0	0	325	10	0	0	335	0	0	335
Propane	931	21	952	38	1,707	242	411	2,398	227	2,357	1,411	59	41	4,095	172	796	8,413
For Petrochemical Feedstock Use	352	0	352	0	221	0	40	261	43	977	225	0	0	1,245	0	70	1,928
For Other Uses	579	21	600	38	1,486	242	371	2,137	184	1,380	1,186	59	41	2,850	172	726	6,485
Butane	84	0	84	0	-5	9	-70	-66	-265	-117	1,403	25	7	1,053	-56	67	1,082
For Petrochemical Feedstock Use	63	0	63	0	0	9	0	9	0	252	1,459	19	0	1,730	1	2	1,805
For Other Uses	21	0	21	0	-5	0	-70	-75	-265	-369	-56	6	7	-677	-57	65	-723
Butane-Propane Mixtures	0	0	0	0	-9	0	0	-9	2	54	0	2	31	89	-26	34	88
For Petrochemical Feedstock Use	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
For Other Uses	0	0	0	0	-9	0	0	-9	2	54	0	2	31	89	-26	34	88
Isobutane for Petro. Feed. Use	0	0	0	0	15	0	0	15	0	52	0	0	0	52	0	0	67
Finished Motor Gasoline	15,592	1,032	16,624	1,199	35,648	5,006	12,040	53,893	9,618	47,385	32,251	1,898	882	92,034	6,796	29,667	199,014
Finished Leaded Motor Gasoline	5,329	483	5,812	555	15,496	2,571	6,936	25,558	5,098	18,291	13,289	718	484	37,880	4,287	12,725	86,262
Finished Unleaded Motor Gasoline	10,263	549	10,812	644	20,152	2,435	5,104	28,335	4,520	29,094	18,962	1,180	398	54,154	2,509	16,942	112,752
Finished Aviation Gasoline	13	0	13	0	103	0	9	112	33	224	126	0	0	383	28	68	604
Naphtha-Type Jet Fuel	591	42	633	77	401	122	323	923	675	881	561	168	405	2,690	385	1,464	6,095
Kerosene-Type Jet Fuel	453	0	453	16	2,982	402	615	4,015	601	7,011	7,033	3	26	14,674	562	6,486	26,190
Kerosene	362	101	463	111	634	21	39	805	27	1,349	1,130	26	-6	2,526	42	31	3,867
Distillate Fuel Oil	6,450	705	7,155	453	11,893	2,385	5,546	20,277	3,547	20,862	11,506	1,647	741	38,303	3,767	10,874	80,376
Residual Fuel Oil	2,725	151	2,876	98	1,426	262	309	2,095	612	6,405	3,484	256	63	10,820	338	9,325	25,454
Naphtha < 400 Deg. For Petro. Feed. Use	304	0	304	0	648	0	53	701	569	1,864	162	97	0	2,692	0	188	3,885
Other Oils > 400 Deg. For Petro. Feed. Use	5	0	5	0	142	0	23	165	100	5,061	1,989	0	0	7,150	1	631	7,952
Special Naphthas	16	20	36	0	316	0	179	495	18	951	61	141	0	1,171	4	57	1,763
Lubricants	446	382	828	0	451	0	311	762	19	2,030	814	316	0	3,179	35	363	5,167
Waxes	19	73	92	0	14	0	31	45	6	120	110	58	0	294	7	65	503
Petroleum Coke	1,002	18	1,020	23	2,247	416	564	3,250	289	2,955	2,534	106	12	5,896	306	3,243	13,715
Marketable	310	0	310	0	1,231	299	388	1,918	56	1,472	1,792	84	0	3,404	138	2,562	8,332
Catalyst	692	18	710	23	1,016	117	176	1,332	233	1,483	742	22	12	2,492	168	681	5,383
Asphalt and Road Oil	2,017	10	2,027	56	2,357	552	448	3,413	569	341	554	869	63	2,396	637	1,418	9,891
Still Gas	1,544	103	1,647	64	2,392	322	737	3,515	437	4,977	2,700	208	44	8,366	516	3,491	17,535
For Petrochemical Feedstock Use	306	0	306	0	2	0	0	2	5	452	86	0	0	543	28	48	927
For Other Uses	1,238	103	1,341	64	2,390	322	737	3,513	432	4,525	2,614	208	44	7,823	488	3,443	16,608
Miscellaneous Products	146	39	185	3	77	34	49	163	71	960	651	38	0	1,720	38	163	2,269
Fuel Use	0	21	21	0	3	0	8	11	0	2	336	0	0	338	4	28	402
Non-Fuel Use	146	18	164	3	74	34	41	152	71	958	315	38	0	1,382	34	135	1,867
Total Production	32,700	2,697	35,397	2,138	63,439	9,773	21,617	96,967	17,155	106,421	68,492	5,917	2,309	200,294	13,552	68,431	414,641
Processing Gain(-) or Loss(+)[1]	-1,619	27	-1,592	-62	-2,481	-385	-585	-3,513	54	-4,469	-2,707	-54	-17	-7,193	-371	-3,691	-16,360

[1] Represents the arithmetic difference between input and output.
Note: See Explanatory Note on negative production.
Source: See Explanatory Notes on Data Collection and Estimation.

Table 15. Percent Refinery Yield of Petroleum Products by PAD District, November 1983

Commodity	PAD District I			PAD District II					PAD District III						PAD Dist. IV	PAD Dist. V	United States
	East Coast	Appala-chian #1	Total	Appala-chian #2	Ind., Ill., Ky.	Minn., Wisc., Daks.	Okla., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	New Mexico	Total	Rocky Mt.	West Coast	
Finished Motor Gasoline[2]	47.9	37.4	47.0	53.6	55.1	49.6	52.1	53.8	49.4	43.6	44.6	28.2	36.7	43.8	50.6	44.6	46.8
Finished Aviation Gasoline[3]	.0	.0	.0	.0	.2	.0	-.1	.1	.2	.3	.2	.0	.0	.2	.2	.1	.2
Liquefied Refinery Gases	3.4	.8	3.2	2.0	3.0	2.9	1.8	2.7	-.2	3.1	4.7	1.6	3.5	3.3	.7	1.4	2.8
Naphtha-Type Jet Fuel	2.0	1.6	2.0	4.1	.7	1.4	1.7	1.1	4.5	.9	.9	3.0	18.2	1.5	3.0	2.3	1.6
Kerosene-Type Jet Fuel	1.5	0	1.4	.8	5.3	4.6	3.3	4.7	4.0	7.2	11.6	.1	1.2	8.2	4.3	10.2	7.0
Kerosene	1.2	3.7	1.4	5.9	1.1	.2	.2	.9	.2	1.4	1.9	.5	-.3	1.4	.3	.0	1.0
Distillate Fuel Oil	21.7	26.1	22.1	24.0	21.1	27.5	29.6	23.7	23.6	21.6	19.0	29.8	33.3	21.3	29.2	17.2	21.5
Residual Fuel Oil	9.2	5.6	8.9	5.2	2.5	3.0	1.7	2.4	4.1	6.6	5.8	4.6	2.8	6.0	2.6	14.7	6.8
Naphtha < 400 Deg. F. Petro. Feed. Use	1.0	0	.9	0	1.2	0	.3	.8	3.8	1.9	.3	1.8	0	1.5	0	.3	1.0
Other Oils > 400 Deg. F. Petro. Feed. Use	.0	0	.0	0	.3	0	.1	.2	.7	5.2	3.3	0	0	4.0	.0	1.0	2.1
Special Naphthas	.1	.7	.1	0	.6	0	1.0	.6	.1	1.0	.1	2.6	0	.7	.0	.1	.5
Lubricants	1.5	14.1	2.6	0	.8	0	1.7	.9	.1	2.1	1.3	5.7	0	1.8	.3	.6	1.4
Waxes	.1	2.7	.3	0	.0	0	.2	.1	.0	.1	.2	1.1	0	.2	.1	.1	.1
Petroleum Coke	3.4	.7	3.1	1.2	4.0	4.8	3.0	3.8	1.9	3.1	4.2	1.9	.5	3.3	2.4	5.1	3.7
Asphalt and Road Oil	6.8	.4	6.3	3.0	4.2	6.4	2.4	4.0	3.8	.4	.9	15.7	2.8	1.3	4.9	2.2	2.6
Still Gas	5.2	3.8	5.1	3.4	4.2	3.7	3.9	4.1	2.9	5.1	4.5	3.8	2.0	4.6	4.0	5.5	4.7
Miscellaneous Products	.5	1.4	.6	.2	.1	.4	.3	.2	.5	1.0	1.1	.7	0	1.0	.3	.3	.6
Processing Gain(-) or Loss(+)[4]	-5.5	1.0	-4.9	-3.3	-4.4	-4.4	-3.1	-4.1	.4	-4.6	-4.5	-1.0	-.8	-4.0	-2.9	-5.8	-4.4

1 Based on crude oil input and net reruns of unfinished oils.
2 Based on total finished motor gasoline output plus net output of motor gasoline blending components, minus input of natural gas plant liquids, other hydrocarbons and alcohol.
3 Based on finished aviation gasoline output plus net output of aviation gasoline blending components.
4 Represents the difference between Input and Production.
Note: Totals may not equal sum of components due to independent rounding.
Note: See Explanatory Note on negative production.
Source: See Explanatory Notes on Data Collection and Estimation.

Table 16. Imports of Crude Oil and Petroleum Products by PAD District, November 1983
(Thousand Barrels)

Commodity	Petroleum Administration for Defense Districts					
	I	II	III	IV	V	Total
Crude Oil (including lease condensate) [1] [2]	21,995	18,866	52,401	1,257	4,834	99,352
Natural Gas Liquids	857	3,811	293	549	320	5,830
Natural Gasoline and Isopentane	240	0	0	0	0	240
Plant Condensate	41	0	0	151	0	193
Liquefied Petroleum Gases	576	3,811	293	398	320	5,398
Ethane	0	1,690	0	0	0	1,690
Propane	423	520	1	243	63	1,250
Butane	153	1,030	0	155	257	1,595
Butane-Propane Mixtures	0	0	292	0	0	292
Ethane-Propane Mixtures	0	571	0	0	0	571
Other Liquids [1]	2,805	261	5,609	62	489	9,226
Unfinished Oils [1]	2,225	212	5,189	62	1	7,689
Motor Gasoline Blending Components	579	49	420	0	488	1,537
Aviation Gasoline Blending Components	0	0	0	0	0	0
Finished Petroleum Products	35,534	799	2,982	149	1,175	40,639
Finished Motor Gasoline	7,416	67	199	42	338	8,063
Finished Leaded Motor Gasoline	3,436	51	199	42	92	3,820
Finished Unleaded Motor Gasoline	3,980	15	0	1	246	4,243
Finished Aviation Gasoline	1	0	0	0	0	1
Naphtha-Type Jet Fuel	0	0	0	0	0	0
Kerosene-Type Jet Fuel	410	0	57	0	84	550
Bonded Aircraft Fuel	0	0	0	0	0	0
Other	410	0	57	0	84	550
Kerosene	723	0	0	0	0	723
Distillate Fuel Oil	4,871	252	257	78	205	5,663
Bonded Ships Bunkers	0	0	0	0	0	0
Other	4,871	252	257	78	205	5,663
Residual Fuel Oil	20,946	346	1,487	28	509	23,317
Bonded Ships Bunkers	0	0	0	0	0	0
Other	20,946	346	1,487	28	509	23,317
Naphtha < 400 Deg. for Petro. Feed. Use	249	18	360	0	0	627
Other Oils > 400 Deg. for Petro. Feed. Use	0	0	0	0	0	0
Special Naphthas	754	33	464	(s)	12	1,264
Lubricants	126	12	42	(s)	21	202
Waxes	18	3	7	0	2	30
Asphalt and Road Oil	16	3	0	0	1	20
Miscellaneous Products	4	64	109	(s)	2	180
Total Imports	61,190	23,738	61,285	2,016	6,818	155,047

[1] Crude oil and unfinished oils are reported by the PAD District in which they are to be processed; all other products are reported by the PAD District of entry.
[2] Includes crude oil imported for storage in the Strategic Petroleum Reserve.
(s) Less than 500 barrels.
Note: Total may not equal sum of components due to independent rounding.
Sources: See Explanatory Notes on Data Collection and Estimation.

Table 17. Imports Of Crude Oil and Petroleum Products by Source and PAD District, November 1983 (Thousand Barrels)

Source	Crude Oil [1]	LPG	Unfinished Oils	Gasoline Blending Components	Finished Motor Gasoline	Jet Fuel	Kerosene	Distil. Fuel Oil	Resid. Fuel Oil	Special Naphthas	Other Products [2]	Total Products	Total Petroleum	Total (Daily Average)
	All PAD Districts													
Arab OPEC														
Algeria	2,911	0	0	0	0	0	0	0	2,040	0	0	2,040	4,951	165
Kuwait	146	0	0	0	0	0	0	0	513	0	0	513	659	22
Saudi Arabia	16,058	302	0	0	0	0	0	0	0	0	0	302	16,360	545
United Arab Emirates	1,169	0	0	0	0	0	0	0	519	0	0	519	1,688	56
Subtotal Arab OPEC	20,284	302	0	0	0	0	0	0	3,072	0	0	3,374	23,658	789
Other OPEC														
Ecuador	882	0	2	0	0	0	0	0	192	0	0	194	1,075	36
Gabon	2,325	0	0	0	0	0	0	0	0	0	0	0	2,325	77
Indonesia	9,006	0	0	0	198	47	0	146	150	0	(s)	541	9,548	318
Iran	621	0	0	0	0	0	0	0	0	0	0	0	621	21
Nigeria	6,382	0	0	0	0	0	0	51	0	0	0	51	6,433	214
Venezuela	6,020	0	240	0	1,812	0	243	667	3,900	179	0	7,041	13,061	435
Subtotal Other OPEC	25,236	0	241	0	2,011	47	243	863	4,242	179	(s)	7,827	33,062	1,102
Other														
Angola	2,725	0	0	0	0	0	0	0	0	0	0	0	2,725	91
Bahamas	0	0	2,097	0	0	0	68	373	1,494	0	265	4,298	4,298	143
Brazil	0	0	0	0	384	0	0	0	334	43	(s)	762	762	25
Canada	9,124	4,688	279	49	349	0	3	668	672	57	359	7,125	16,249	542
Congo	1,044	0	0	0	0	0	0	0	0	0	0	0	1,044	35
Egypt	844	0	0	0	0	0	0	0	0	0	0	0	844	28
France	0	114	0	0	0	0	0	0	0	0	(s)	115	115	4
Mexico	19,095	293	3	579	199	57	0	808	473	1	9	2,422	21,518	717
Netherlands	1	0	0	420	462	0	0	0	361	18	(s)	1,261	1,262	42
Netherlands Antilles	0	0	1,465	0	509	0	0	190	2,158	0	0	4,322	4,322	144
Norway	1,640	0	0	0	0	0	0	0	0	0	0	0	1,640	55
Oman	3,637	0	0	0	0	0	0	0	0	0	0	0	3,637	121
People's Republic of China	0	0	0	488	0	0	0	0	0	0	0	488	488	16
Peru	0	0	0	0	0	0	0	0	1,792	0	0	1,792	1,792	60
Puerto Rico	0	0	416	0	507	0	107	206	0	301	118	1,655	1,655	55
Romania	0	0	0	0	494	0	0	0	0	569	240	1,303	1,303	43
Spain	0	0	0	0	0	0	0	0	178	0	0	178	178	6
Trinidad and Tobago	2,732	0	0	0	0	0	0	214	320	0	28	561	3,294	110
Tunisia	564	0	0	0	0	0	0	0	0	0	0	0	564	19
United Kingdom	9,814	0	0	0	181	0	0	0	0	14	(s)	195	10,009	334
Virgin Islands	0	0	1,377	0	1,737	410	302	2,290	7,005	0	73	13,193	13,193	440
Zaire	1,061	0	0	0	0	0	0	0	0	0	0	0	1,061	35
Other Western Hemisphere	0	0	0	0	0	0	0	0	679	60	104	843	843	28
Other Eastern Hemisphere	1,551	(s)	1,810	0	1,230	36	0	52	537	22	294	3,981	5,532	184
Subtotal Other	53,833	5,096	7,447	1,537	6,052	503	480	4,800	16,003	1,085	1,491	44,494	98,327	3,278
Total Imports	99,352	5,398	7,669	1,537	8,063	550	723	5,663	23,317	1,264	1,492	55,695	155,047	5,168

See footnotes at end of table.

Table 17. Imports Of Crude Oil and Petroleum Products by Source and PAD District, November 1983 (Thousand Barrels) (continued)

Source	Crude Oil 1	LPG	Unfinished Oils	Gasoline Blending Components	Finished Motor Gasoline	Jet Fuel	Kerosene	Distil. Fuel Oil	Resid. Fuel Oil	Special Naphthas	Other Products 2	Total Products	Total Petroleum	Total (Daily Average)
	PAD District I													
Arab OPEC														
Algeria	1,171	0	0	0	0	0	0	0	2,040	0	0	2,040	3,211	107
Saudi Arabia	3,707	302	0	0	0	0	0	0	0	0	0	302	4,009	134
United Arab Emirates	0	0	0	0	0	0	0	0	519	0	0	519	519	17
Subtotal Arab OPEC	4,878	302	0	0	0	0	0	0	2,559	0	0	2,861	7,738	258
Other OPEC														
Ecuador	0	0	0	0	0	0	0	0	192	0	0	192	192	6
Gabon	1,009	0	0	0	0	0	0	0	0	0	0	0	1,009	34
Indonesia	2,624	0	0	0	0	0	0	0	0	0	0	0	2,624	87
Nigeria	830	0	0	0	0	0	0	0	0	0	0	0	830	28
Venezuela	1,685	0	0	0	1,812	0	243	667	3,547	0	0	6,269	7,954	265
Subtotal Other OPEC	6,147	0	0	0	1,812	0	243	667	3,739	0	0	6,461	12,609	420
Other														
Angola	581	0	0	0	0	0	0	0	0	0	0	0	581	19
Bahamas	0	0	0	0	0	0	68	373	1,494	0	0	1,936	1,936	65
Brazil	0	0	0	0	384	0	0	0	334	0	(s)	719	719	24
Canada	923	159	5	0	173	0	3	338	292	11	79	1,060	1,983	66
France	0	114	0	0	0	0	0	0	0	0	(s)	114	114	4
Mexico	2,099	0	0	579	0	0	0	594	467	0	0	1,640	3,739	125
Netherlands	1	0	0	0	462	0	0	0	361	4	(s)	826	827	28
Netherlands Antilles	0	0	1,245	0	509	0	0	190	1,964	0	0	3,907	3,907	130
Norway	1,141	0	0	0	0	0	0	0	0	0	0	0	1,141	38
Oman	492	0	0	0	0	0	0	0	0	0	0	0	492	16
Peru	0	0	0	0	0	0	0	0	1,792	0	0	1,792	1,792	60
Puerto Rico	0	0	416	0	507	0	107	206	0	156	118	1,510	1,510	50
Romania	0	0	0	0	494	0	0	0	0	569	240	1,303	1,303	43
Spain	0	0	0	0	0	0	0	0	178	0	0	178	178	6
Trinidad and Tobago	0	0	0	0	0	0	0	214	320	0	0	534	534	18
United Kingdom	4,127	0	0	0	181	0	0	0	0	14	(s)	195	4,322	144
Virgin Islands	0	0	559	0	1,737	410	302	2,290	6,767	0	0	12,064	12,064	402
Zaire	1,061	0	0	0	0	0	0	0	0	0	0	0	1,061	35
Other Western Hemisphere	0	0	0	0	0	0	0	0	679	0	0	679	679	23
Other Eastern Hemisphere	546	(s)	0	0	1,158	0	0	0	0	(s)	259	1,417	1,962	65
Subtotal Other	10,969	274	2,225	579	5,604	410	480	4,204	14,648	754	696	29,873	40,843	1,361
Total Imports	21,995	576	2,225	579	7,416	410	723	4,871	20,946	754	696	39,195	61,190	2,040
	PAD District II													
Arab OPEC														
Algeria	866	0	0	0	0	0	0	0	0	0	0	0	866	29
Saudi Arabia	1,881	0	0	0	0	0	0	0	0	0	0	0	1,881	63
Subtotal Arab OPEC	2,747	0	0	0	0	0	0	0	0	0	0	0	2,747	92

See footnotes at end of table.

Table 17. Imports Of Crude Oil and Petroleum Products by Source and PAD District, November 1983 (Thousand Barrels) (continued)

Source	Crude Oil 1	LPG	Unfinished Oils	Gasoline Blending Components	Finished Motor Gasoline	Jet Fuel	Kerosene	Distil. Fuel Oil	Resid. Fuel Oil	Special Naphthas	Other Products 2	Total Products	Total Petroleum	Total (Daily Average)
PAD District II														
Other OPEC														
Nigeria	1,131	0	0	0	0	0	0	0	0	0	0	0	1,131	38
Subtotal Other OPEC	1,131	0	0	0	0	0	0	0	0	0	0	0	1,131	38
Other														
Canada	6,797	3,811	212	49	67	0	0	252	346	33	100	4,871	11,668	389
Congo	444	0	0	0	0	0	0	0	0	0	0	0	444	15
Egypt	440	0	0	0	0	0	0	0	0	0	0	0	440	15
France	0	0	0	0	0	0	0	0	0	0	(s)	(s)	(s)	(s)
Mexico	3,292	0	0	0	0	0	0	0	0	0	(s)	(s)	3,292	110
Netherlands	0	0	0	0	0	0	0	0	0	0	(s)	(s)	(s)	(s)
Oman	1,616	0	0	0	0	0	0	0	0	0	0	0	1,616	54
Trinidad and Tobago	918	0	0	0	0	0	0	0	0	0	0	0	918	31
United Kingdom	1,028	0	0	0	0	0	0	0	0	0	(s)	(s)	1,029	34
Other Eastern Hemisphere	453	0	0	0	0	0	0	0	0	0	(s)	(s)	454	15
Subtotal Other	14,988	3,811	212	49	67	0	0	252	346	33	101	4,872	19,860	662
Total Imports	18,866	3,811	212	49	67	0	0	252	346	33	101	4,872	23,738	791
PAD District III														
Arab OPEC														
Algeria	875	0	0	0	0	0	0	0	0	0	0	0	875	29
Kuwait	146	0	0	0	0	0	0	0	513	0	0	513	659	22
Saudi Arabia	10,470	0	0	0	0	0	0	0	0	0	0	0	10,470	349
United Arab Emirates	1,169	0	0	0	0	0	0	0	0	0	0	0	1,169	39
Subtotal Arab OPEC	12,660	0	0	0	0	0	0	0	513	0	0	513	13,172	439
Other OPEC														
Ecuador	882	0	2	0	0	0	0	0	0	0	0	2	883	29
Gabon	1,316	0	0	0	0	0	0	0	0	0	0	0	1,316	44
Indonesia	1,695	0	0	0	0	0	0	0	0	0	0	0	1,695	56
Iran	621	0	0	0	0	0	0	0	0	0	0	0	621	21
Nigeria	4,421	0	0	0	0	0	0	51	0	0	0	51	4,472	149
Venezuela	4,336	0	240	0	0	0	0	0	353	179	0	772	5,108	170
Subtotal Other OPEC	13,270	0	241	0	0	0	0	51	353	179	0	824	14,094	470
Other														
Angola	2,144	0	0	0	0	0	0	0	0	0	0	0	2,144	71
Bahamas	0	0	2,097	0	0	0	0	0	0	0	265	2,362	2,362	79
Brazil	0	0	0	0	0	0	0	0	0	43	0	43	43	1
Canada	(s)	0	0	0	0	0	0	0	0	0	27	27	27	1
Congo	601	0	0	0	0	0	0	0	0	0	0	0	601	20
Egypt	403	0	0	0	0	0	0	0	0	0	0	0	403	13
France	0	0	0	0	0	0	0	0	0	0	(s)	(s)	(s)	(s)
Mexico	13,705	293	3	(s)	199	57	0	206	0	1	7	765	14,470	482
Netherlands	0	0	0	420	0	0	0	0	(s)	15	0	435	435	14
Netherlands Antilles	0	0	221	0	0	0	0	0	0	0	0	221	221	7

See footnotes at end of table.

Table 17. Imports Of Crude Oil and Petroleum Products by Source and PAD District, November 1983 (Thousand Barrels) (continued)

Source	Crude Oil [1]	LPG	Unfinished Oils	Gasoline Blending Components	Finished Motor Gasoline	Jet Fuel	Kerosene	Distil. Fuel Oil	Resid. Fuel Oil	Special Naphthas	Other Products [2]	Total Products	Total Petroleum	Total (Daily Average)
PAD District III														
Other														
Norway	499	0	0	0	0	0	0	0	0	0	0	0	499	17
Oman	1,530	0	0	0	0	0	0	0	0	0	0	0	1,530	51
Puerto Rico	0	0	0	0	0	0	0	0	0	145	0	145	145	5
Trinidad and Tobago	1,814	0	0	0	0	0	0	0	0	0	28	28	1,842	61
Tunisia	564	0	0	0	0	0	0	0	0	0	0	0	564	19
United Kingdom	4,659	0	0	0	0	0	0	0	0	0	0	0	4,659	155
Virgin Islands	0	0	817	0	0	0	0	0	238	0	73	1,129	1,129	38
Other Western Hemisphere	0	0	0	0	0	0	0	0	0	60	104	164	164	5
Other Eastern Hemisphere	552	0	1,810	0	0	0	0	0	383	21	14	2,228	2,781	93
Subtotal Other	26,472	293	4,948	420	199	57	0	206	621	286	517	7,547	34,019	1,134
Total Imports	52,401	293	5,189	420	199	57	0	257	1,487	464	517	8,884	61,285	2,043
PAD District IV														
Other														
Canada	1,257	398	62	0	42	0	0	78	28	(s)	152	759	2,016	67
Subtotal Other	1,257	398	62	0	42	0	0	78	28	(s)	152	759	2,016	67
Total Imports	1,257	398	62	0	42	0	0	78	28	(s)	152	759	2,016	67
PAD District V														
Other OPEC														
Indonesia	4,687	0	0	0	198	47	0	146	150	0	(s)	541	5,229	174
Subtotal Other OPEC	4,687	0	0	0	198	47	0	146	150	0	(s)	541	5,229	174
Other														
Canada	147	320	1	0	67	0	0	0	6	12	2	408	554	18
Mexico	0	0	0	0	0	0	0	8	6	0	3	17	17	1
Netherlands Antilles	0	0	0	0	0	0	0	0	194	0	0	194	194	6
People's Republic of China	0	0	0	488	0	0	0	0	0	0	0	488	488	16
Other Eastern Hemisphere	0	0	0	0	73	36	0	52	154	0	21	336	336	11
Subtotal Other	147	320	1	488	140	36	0	60	360	12	26	1,443	1,589	53
Total Imports	4,834	320	1	488	338	84	0	205	509	12	26	1,984	6,818	227

[1] Includes crude oil imported for storage in the Strategic Petroleum Reserve.
[2] Includes aviation gasoline, waxes, asphalt, lubricants, natural gasoline, isopentane, plant condensate, naphthas less than 400 degrees F, other oils greater than 400 degrees F and miscellaneous products.
(s) Less than 500 barrels or less than 500 barrels per day.
Note: Totals may not equal sum of components due to independent rounding.
Sources: See Explanatory Notes on Data Collection and Estimation.

Table 18. Exports Of Crude Oil And Petroleum Products By PAD District, November 1983
(Thousand Barrels)

Commodity	Petroleum Administration for Defense Districts					
	I	II	III	IV	V	Total
Crude Oil (including lease condensate) [1]	0	248	0	0	5,319	5,567
Liquefied Petroleum Gases	25	11	728	0	215	980
Ethane	(s)	0	(s)	0	0	(s)
Propane	13	7	447	0	85	551
Butane	12	5	282	0	130	429
Butane-Propane Mixtures	0	0	0	0	0	0
Finished Motor Gasoline	2	0	61	0	3	66
Naphtha-Type Jet Fuel	0	0	0	0	0	0
Kerosene-Type Jet Fuel	122	0	206	0	45	373
Kerosene	(s)	1	(s)	0	1	2
Distillate Fuel Oil	1	1	505	0	1,108	1,614
Residual Fuel Oil	(s)	0	2,324	0	2,674	4,998
Naphtha < 400 Deg. for Petrochem. Feedstock	61	6	96	(s)	12	175
Other Oils > 400 Deg. for Petrochem. Feedstock	1	29	435	0	50	516
Special Naphthas	3	4	45	0	2	54
Lubricants	124	22	178	1	77	402
Waxes	4	1	15	0	4	24
Petroleum Coke	36	318	3,021	0	2,182	5,556
Asphalt	7	4	(s)	1	1	14
Miscellaneous Products	16	2	15	0	4	38
Total Product Exports	401	400	7,629	2	6,379	14,812
Total Exports	401	648	7,629	2	11,698	20,379

[1] Exports of crude oil are prohibited by law. However, some crude oil is exchanged with Canada on a barrel for barrel basis, and crude oil is shipped to U.S. Territories (especially Puerto Rico and the Virgin Islands) to be refined there. The Statistical Tracking Systems count these exchanges and shipments as imports and exports.

(s) Less than 500 barrels.

Note: Total may not equal sum of components due to independent rounding.

Sources: See Explanatory Notes on Data Collection and Estimation.

Table 19. Exports of Crude Oil and Petroleum Products by Destination, November 1983
(Thousand Barrels)

Destination	Crude Oil 1	LPG	Finished Motor Gasoline	Jet Fuel	Dist. Fuel Oil	Residual Fuel Oil	Special Naphthas	Lubri-cants	Waxes	Petro-leum Coke	Asphalt	Other	Total	Total (Daily Average)
Argentina	0	(s)	0	0	0	0	0	(s)	0	0	0	(s)	1	(s)
Australia	0	2	(s)	0	1	(s)	4	13	(s)	193	(s)	6	218	7
Bahamas	0	(s)	1	0	(s)	137	0	1	(s)	0	0	(s)	140	5
Bahrain	0	0	0	0	0	0	0	(s)	0	64	(s)	0	65	2
Belgium & Luxembourg	0	0	0	0	0	0	(s)	6	(s)	689	0	1	697	23
Brazil	0	0	0	0	0	0	0	(s)	0	0	0	(s)	(s)	(s)
Cameroon	0	0	0	0	0	0	0	(s)	0	30	0	0	30	1
Canada	248	14	(s)	0	357	226	6	67	2	419	2	63	1,404	47
Chile	0	0	0	0	0	0	0	2	(s)	0	(s)	2	4	(s)
China (Taiwan)	0	(s)	0	0	0	865	(s)	12	(s)	62	(s)	(s)	940	31
Colombia	0	0	0	0	0	0	(s)	2	(s)	(s)	0	(s)	3	(s)
Costa Rica	0	(s)	0	0	0	0	(s)	3	(s)	0	0	(s)	4	(s)
Denmark	0	(s)	0	0	0	0	0	1	(s)	0	0	(s)	1	(s)
Dominican Republic	0	82	0	0	0	0	(s)	1	(s)	0	0	1	84	3
Ecuador	0	123	10	0	88	0	(s)	(s)	(s)	0	(s)	(s)	222	7
Egypt	0	0	0	0	(s)	0	(s)	(s)	0	0	0	(s)	(s)	(s)
El Salvador	0	(s)	0	0	0	0	0	2	(s)	0	0	(s)	3	(s)
Finland	0	0	0	0	0	0	0	(s)	0	0	0	0	(s)	(s)
France	0	1	(s)	0	0	0	(s)	1	1	222	0	69	294	10
French Pacific Isl	0	0	0	0	0	0	0	1	0	0	0	0	1	(s)
Ghana	0	0	0	0	0	0	0	(s)	0	0	0	(s)	(s)	(s)
Greece	0	0	0	0	0	0	(s)	(s)	(s)	0	0	(s)	(s)	(s)
Guatemala	0	51	0	0	0	0	0	3	0	0	(s)	(s)	55	2
Honduras	0	1	(s)	0	0	0	0	8	0	0	(s)	1	10	(s)
Hong Kong	0	(s)	0	0	0	0	0	1	1	0	(s)	(s)	2	(s)
India	0	0	0	0	0	0	0	(s)	(s)	0	0	0	(s)	(s)
Indonesia	0	1	0	0	0	0	0	29	0	0	0	2	31	1
Iran	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Israel	0	(s)	0	0	0	0	(s)	(s)	0	(s)	0	(s)	1	(s)
Italy	0	1	0	0	0	670	(s)	1	1	906	(s)	225	1,803	60
Ivory Coast	0	0	0	0	0	0	0	0	0	0	0	(s)	(s)	(s)
Jamaica	0	35	0	0	0	0	0	1	0	0	0	(s)	36	1
Japan	0	0	(s)	0	741	953	7	47	3	1,155	(s)	65	2,971	99
Jordan	0	0	0	0	0	0	0	1	0	0	0	(s)	1	(s)
Korea, Republic of	0	4	0	0	0	476	(s)	1	(s)	153	6	4	643	21
Kuwait	0	0	0	0	0	0	(s)	(s)	0	0	0	0	(s)	(s)
Lebanon	0	0	0	0	0	0	0	1	0	0	0	0	1	(s)
Liberia	0	(s)	0	0	0	172	0	(s)	0	0	0	(s)	172	6
Malaysia	0	1	0	0	0	0	0	1	0	0	0	1	3	(s)
Mexico	0	494	3	45	0	0	10	84	3	34	0	9	681	23
Netherlands	0	(s)	0	0	211	408	14	17	0	494	0	24	1,168	39
Netherlands Antilles	0	(s)	50	0	0	0	(s)	(s)	0	0	(s)	0	51	2
New Zealand	0	(s)	0	0	0	0	1	3	(s)	88	0	3	95	3
Nicaragua	0	(s)	0	0	0	0	0	(s)	0	0	0	0	(s)	(s)
Nigeria	0	0	0	206	0	0	0	(s)	0	0	0	0	206	7
Norway	0	0	0	0	0	0	0	4	(s)	28	0	(s)	33	1
Pacific Trust Terr.	0	0	0	0	0	0	0	(s)	0	0	0	0	(s)	(s)
Panama	0	0	0	0	0	0	0	9	(s)	0	(s)	(s)	9	(s)
Peru	0	(s)	0	0	216	0	(s)	1	(s)	0	0	(s)	217	7
Philippines	0	0	0	0	0	0	1	7	(s)	0	0	50	58	2
Puerto Rico	0	54	1	0	0	(s)	(s)	14	1	0	0	11	82	3
Rep. of South Africa	0	(s)	0	0	0	0	0	9	11	20	(s)	1	40	1
Saudi Arabia	0	1	0	0	0	0	(s)	7	0	0	0	2	10	(s)

See footnotes at end of table.

Table 19. Exports of Crude Oil and Petroleum Products by Destination, November 1983
(Thousand Barrels)
(continued)

Destination	Crude Oil 1	LPG	Finished Motor Gasoline	Jet Fuel	Dist. Fuel Oil	Residual Fuel Oil	Special Naphthas	Lubri-cants	Waxes	Petro-leum Coke	Asphalt	Other	Total	Total (Daily Average)
Singapore	0	0	0	0	0	0	3	1	(s)	0	(s)	1	5	(s)
Spain	0	0	0	0	0	400	0	1	(s)	713	0	144	1,258	42
Surinam	0	0	0	0	0	0	0	(s)	0	13	0	(s)	14	(s)
Sweden	0	0	0	0	0	311	0	1	(s)	1	0	1	314	10
Switzerland	0	(s)	0	0	0	0	0	(s)	(s)	91	0	1	92	3
Thailand	0	(s)	0	0	0	0	1	14	(s)	0	0	1	16	1
Trinidad and Tobago	0	(s)	0	122	0	0	0	2	(s)	1	0	(s)	125	4
Turkey	0	0	0	0	0	0	(s)	5	0	0	0	16	21	1
United Arab Emirates	0	(s)	0	0	0	0	0	(s)	0	56	(s)	(s)	57	2
United Kingdom	0	1	0	0	1	0	3	1	(s)	30	(s)	3	39	1
Uruguay	0	0	0	0	0	0	(s)	1	(s)	0	0	(s)	2	(s)
Venezuela	0	(s)	0	0	0	0	3	1	(s)	88	(s)	3	95	3
Virgin Islands	4,785	0	0	0	0	380	0	(s)	0	0	0	0	5,165	172
West Germany	0	0	0	0	0	0	(s)	1	(s)	4	0	3	9	(s)
Yugoslavia	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other	534	110	0	0	(s)	0	(s)	11	(s)	0	4	17	676	23
Total	5,567	980	66	373	1,614	4,998	54	402	24	5,556	14	731	20,379	679

1 Exports of crude oil are prohibited by law. However, some crude oil is exchanged with Canada on a barrel for barrel basis, and crude oil is shipped to U.S. Territories (especially Puerto Rico and the Virgin Islands) to be refined there. The Statistical Tracking Systems count these exchanges and shipments as imports and exports.

(s) Less than 500 barrels or less than 500 barrels per day.

Note: Total may not equal sum of components due to independent rounding.

Source: See Explanatory Notes on Data Collection and Estimation.

Table 20. Stocks of Crude Oil and Petroleum Products By PAD District, November 1983
(Thousand Barrels)

Commodity	PAD District I			PAD District II					PAD District III						PAD Dist. IV	PAD Dist. V	United States
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Daks.	Okla., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	New Mexico	Total	Rocky Mt.	West Coast	
Crude Oil (incl. lease condensate)																	
Refinery	—	—	12,928	—	—	—	—	14,277	—	—	—	—	—	46,336	1,885	23,090	98,516
Tank Farms and Pipelines	—	—	1,245	—	—	—	—	57,703	—	—	—	—	—	93,732	9,885	28,793	191,358
Leases	—	—	60	—	—	—	—	1,573	—	—	—	—	—	17,271	1,396	1,721	22,021
Strategic Petroleum Reserve[1]	—	—	0	—	—	—	—	0	—	—	—	—	—	371,291	0	0	371,291
Alaskan In-Transit	—	—	0	—	—	—	—	0	—	—	—	—	—	0	0	29,588	29,588
Total	—	—	14,233	—	—	—	—	73,553	—	—	—	—	—	528,630	13,166	83,192	712,774
Total Stocks, All Oils (excl. Crude Oil)																	
Refinery	40,831	3,082	43,913	1,052	41,731	6,224	14,833	63,840	10,159	76,568	47,058	5,092	1,536	140,413	10,990	60,249	319,405
Bulk Terminal	—	—	136,643	—	—	—	—	96,306	—	—	—	—	—	95,341	2,785	24,951	356,026
Pipeline	—	—	30,048	—	—	—	—	36,073	—	—	—	—	—	39,676	2,492	3,934	112,223
Natural Gas Processing Plant	224	48	272	0	223	53	1,343	1,619	1,663	4,773	819	94	235	7,584	218	152	9,845
Total	—	—	210,876	—	—	—	—	197,838	—	—	—	—	—	283,014	16,485	89,286	797,499
Natural Gasoline and Isopentane																	
Refinery	16	0	16	0	58	66	114	238	102	160	194	1	9	466	12	6	738
Bulk Terminal	—	—	4	—	—	—	—	1,015	—	—	—	—	—	2,332	2	2	3,355
Pipeline	—	—	0	—	—	—	—	355	—	—	—	—	—	670	15	5	1,045
Natural Gas Processing Plant	3	12	15	0	20	11	152	183	280	172	192	27	41	712	48	22	980
Total	—	—	35	—	—	—	—	1,791	—	—	—	—	—	4,180	77	35	6,118
Unfractionated Stream																	
Bulk Terminal	—	—	0	—	—	—	—	2,371	—	—	—	—	—	1,413	0	0	3,784
Pipeline	—	—	0	—	—	—	—	211	—	—	—	—	—	2,537	466	0	3,214
Natural Gas Processing Plant	0	3	3	0	104	2	791	897	198	1,844	122	1	16	2,181	33	0	3,114
Total	—	—	3	—	—	—	—	3,479	—	—	—	—	—	6,131	499	0	10,112
Plant Condensate																	
Refinery	0	0	0	0	5	0	0	5	3	44	0	62	0	109	0	0	114
Bulk Terminal	—	—	0	—	—	—	—	0	—	—	—	—	—	3	0	0	3
Pipeline	—	—	0	—	—	—	—	0	—	—	—	—	—	288	0	0	288
Natural Gas Processing Plant	0	0	0	0	2	2	3	7	28	30	14	9	0	81	14	0	102
Total	—	—	0	—	—	—	—	12	—	—	—	—	—	481	14	0	507
Liquefied Petroleum Gases																	
Refinery	690	9	699	313	2,140	123	641	3,217	320	371	2,780	36	22	3,529	294	570	8,309
Bulk Terminal	—	—	2,257	—	—	—	—	26,985	—	—	—	—	—	60,733	108	2,589	92,672
Pipeline	—	—	2,586	—	—	—	—	6,077	—	—	—	—	—	3,330	45	0	12,038
Natural Gas Processing Plant	200	33	233	0	95	38	397	530	926	2,725	491	55	177	4,374	113	130	5,380
Total	—	—	5,775	—	—	—	—	36,809	—	—	—	—	—	71,966	560	3,289	118,399

See footnotes at end of table.

Table 20. Stocks of Crude Oil and Petroleum Products By PAD District, November 1983 (Thousand Barrels) (continued)

Commodity	PAD District I			PAD District II					PAD District III						PAD Dist. IV	PAD Dist. V	United States
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Daks.	Okla., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	New Mexico	Total	Rocky Mt.	West Coast	
Ethane																	
Refinery	0	0	0	0	2	14	0	16	0	10	0	0	0	10	0	0	26
Bulk Terminal	—	—	0	—	—	—	—	873	—	—	—	—	—	4,651	0	0	5,524
Pipeline	—	—	0	—	—	—	—	1,040	—	—	—	—	—	380	0	0	1,420
Natural Gas Processing Plant	0	0	0	0	24	0	24	48	2	575	0	0	9	586	1	0	635
Total	—	—	0	—	—	—	—	1,977	—	—	—	—	—	5,627	1	0	7,605
Propane for Petrochemical Feedstock Use																	
Refinery	44	0	44	0	89	0	0	89	2	7	29	0	0	38	0	0	171
Total	—	—	44	—	—	—	—	89	—	—	—	—	—	38	0	0	171
Propane For Other Uses																	
Refinery	615	5	620	0	1,429	33	257	1,719	78	60	1,215	6	2	1,361	150	155	4,005
Bulk Terminal	—	—	1,766	—	—	—	—	18,300	—	—	—	—	—	27,195	108	747	48,116
Pipeline	—	—	2,415	—	—	—	—	2,919	—	—	—	—	—	1,063	10	0	6,407
Natural Gas Processing Plant	189	31	220	0	50	27	125	202	413	319	365	22	86	1,205	76	116	1,819
Total	—	—	5,021	—	—	—	—	23,140	—	—	—	—	—	30,824	344	1,018	60,347
Butane For Petro. Feed Use																	
Refinery	0	0	0	0	0	29	0	29	0	20	0	1	0	21	1	2	53
Total	—	—	0	—	—	—	—	29	—	—	—	—	—	21	1	2	53
Butane For Other Uses																	
Refinery	29	4	33	279	431	30	261	1,001	138	196	670	18	14	1,036	108	286	2,464
Bulk Terminal	—	—	396	—	—	—	—	2,565	—	—	—	—	—	13,309	0	1,192	17,462
Pipeline	—	—	150	—	—	—	—	983	—	—	—	—	—	496	0	0	1,629
Natural Gas Processing Plant	10	2	12	0	10	9	46	65	322	1,046	82	18	26	1,494	35	9	1,615
Total	—	—	591	—	—	—	—	4,614	—	—	—	—	—	16,335	143	1,487	23,170
Butane-Propane Mixtures For Other Uses																	
Refinery	0	0	0	0	2	0	0	2	1	9	3	1	1	15	3	92	112
Bulk Terminal	—	—	0	—	—	—	—	393	—	—	—	—	—	40	0	533	966
Pipeline	—	—	0	—	—	—	—	20	—	—	—	—	—	650	0	0	670
Natural Gas Processing Plant	0	0	0	0	0	0	0	0	4	2	0	2	0	8	0	2	10
Total	—	—	0	—	—	—	—	415	—	—	—	—	—	713	3	627	1,758
Ethane-Propane Mixtures																	
Bulk Terminal	—	—	0	—	—	—	—	3,392	—	—	—	—	—	9,725	0	0	13,117
Pipeline	—	—	0	—	—	—	—	699	—	—	—	—	—	556	35	0	1,290
Natural Gas Processing Plant	0	0	0	0	0	0	189	189	113	0	0	0	45	158	0	0	347
Total	—	—	0	—	—	—	—	4,280	—	—	—	—	—	10,439	35	0	14,754

See footnotes at end of table.

Table 20. Stocks of Crude Oil and Petroleum Products By PAD District, November 1983 (Thousand Barrels) (continued)

Commodity	PAD District I			PAD District II					PAD District III						PAD Dist. IV	PAD Dist. V	United States
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Daks.	Okla., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	New Mexico	Total	Rocky Mt	West Coast	
Isobutane																	
Refinery	2	0	2	34	187	17	123	361	101	69	863	10	5	1,048	32	35	1,478
Bulk Terminal	—	—	95	—	—	—	—	1,462	—	—	—	—	—	5,813	0	117	7,487
Pipeline	—	—	21	—	—	—	—	416	—	—	—	—	—	185	0	0	622
Natural Gas Processing Plant	1	0	1	0	11	2	13	26	72	783	44	13	11	923	1	3	954
Total	—	—	119	—	—	—	—	2,265	—	—	—	—	—	7,969	33	155	10,541
Other Hydrocarbons and Alcohol																	
Refinery	58	0	58	0	119	0	0	119	1	88	12	0	0	101	0	4	282
Total	—	—	58	—	—	—	—	119	—	—	—	—	—	101	0	4	282
Unfinished Oils																	
Refinery																	
Naphthas and Lighter	3,654	141	3,795	39	2,439	175	1,044	3,697	756	6,706	5,238	138	93	12,931	554	4,153	25,130
Kerosene and Lighter Gas Oils	1,901	25	1,926	0	2,568	2	962	3,532	665	6,764	1,268	28	8	8,733	444	4,115	18,750
Heavy Gas Oils	6,485	297	6,782	138	4,638	282	1,296	6,354	985	10,540	7,472	186	130	19,313	1,314	11,119	44,882
Residuum	1,664	269	1,933	2	3,189	9	1,386	4,586	266	4,402	3,172	56	0	7,896	533	5,284	20,232
Total	13,704	732	14,436	179	12,834	468	4,688	18,169	2,672	28,412	17,150	408	231	48,873	2,845	24,671	108,994
Motor Gasoline Blending Components																	
Refinery	4,231	126	4,357	45	5,207	800	1,369	7,421	1,591	10,268	5,844	165	255	18,123	1,969	6,937	38,807
Bulk Terminal	—	—	222	—	—	—	—	95	—	—	—	—	—	698	1	22	1,038
Pipeline	—	—	0	—	—	—	—	48	—	—	—	—	—	17	0	0	65
Total	—	—	4,579	—	—	—	—	7,564	—	—	—	—	—	18,838	1,970	6,959	39,910
Aviation Gasoline Blending Components																	
Refinery	0	0	0	0	60	0	24	84	0	32	151	0	0	183	0	20	287
Total	—	—	0	—	—	—	—	84	—	—	—	—	—	183	0	20	287
Total Finished Motor Gasoline																	
Refinery	5,001	290	5,291	85	6,437	1,682	3,205	11,409	2,266	9,776	5,387	755	230	18,414	2,501	7,092	44,707
Bulk Terminal	—	—	38,433	—	—	—	—	32,796	—	—	—	—	—	13,422	1,670	10,598	96,919
Pipeline	—	—	15,235	—	—	—	—	16,644	—	—	—	—	—	19,314	1,223	1,964	54,380
Natural Gas Processing Plant	21	0	21	0	0	0	0	0	0	0	0	0	0	0	9	0	30
Total	—	—	58,980	—	—	—	—	60,849	—	—	—	—	—	51,150	5,403	19,654	196,036
Finished Leaded Motor Gasoline																	
Refinery	1,781	169	1,950	42	3,006	885	1,943	5,876	1,230	4,363	2,579	336	133	8,641	1,655	3,258	21,380
Bulk Terminal	—	—	16,700	—	—	—	—	16,825	—	—	—	—	—	6,847	1,049	5,208	46,629
Pipeline	—	—	8,727	—	—	—	—	8,308	—	—	—	—	—	9,766	747	825	28,373
Natural Gas Processing Plant	11	0	11	0	0	0	0	0	0	0	0	0	0	0	7	0	18
Total	—	—	27,388	—	—	—	—	31,009	—	—	—	—	—	25,254	3,458	9,291	96,400

See footnotes at end of table.

Table 20. Stocks of Crude Oil and Petroleum Products By PAD District, November 1983 (Thousand Barrels) (continued)

Commodity	PAD District I			PAD District II					PAD District III						PAD Dist. IV	PAD Dist. V	United States
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Daks.	Okla., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	New Mexico	Total	Rocky Mt.	West Coast	
Finished Unleaded Motor Gasoline																	
Refinery	3,220	121	3,341	43	3,431	797	1,262	5,533	1,036	5,413	2,808	419	97	9,773	846	3,834	23,327
Bulk Terminal	—	—	21,733	—	—	—	—	15,971	—	—	—	—	—	6,575	621	5,390	50,290
Pipeline	—	—	6,508	—	—	—	—	8,336	—	—	—	—	—	9,548	476	1,139	26,007
Natural Gas Processing Plant	10	0	10	0	0	0	0	0	0	0	0	0	0	0	2	0	12
Total	—	—	31,592	—	—	—	—	29,840	—	—	—	—	—	25,896	1,945	10,363	99,636
Finished Aviation Gasoline																	
Refinery	38	0	38	0	150	0	16	166	126	308	185	0	0	619	48	179	1,050
Bulk Terminal	—	—	411	—	—	—	—	383	—	—	—	—	—	155	10	294	1,253
Pipeline	—	—	0	—	—	—	—	52	—	—	—	—	—	3	0	0	55
Natural Gas Processing Plant	0	0	0	0	0	0	0	0	52	0	0	0	0	52	0	0	52
Total	—	—	449	—	—	—	—	601	—	—	—	—	—	829	58	473	2,410
Naphtha-Type Jet Fuel																	
Refinery	193	34	227	0	520	78	192	790	326	692	251	190	214	1,673	234	887	3,811
Bulk Terminal	—	—	263	—	—	—	—	730	—	—	—	—	—	335	7	491	1,826
Pipeline	—	—	151	—	—	—	—	143	—	—	—	—	—	341	57	313	1,005
Total	—	—	641	—	—	—	—	1,663	—	—	—	—	—	2,349	298	1,691	6,642
Kerosene-Type Jet Fuel																	
Refinery	1,284	0	1,284	65	1,438	96	98	1,697	225	3,262	2,928	14	79	6,508	326	3,066	12,881
Bulk Terminal	—	—	5,871	—	—	—	—	4,383	—	—	—	—	—	2,198	241	2,833	15,526
Pipeline	—	—	3,814	—	—	—	—	2,142	—	—	—	—	—	4,141	140	602	10,839
Total	—	—	10,969	—	—	—	—	8,222	—	—	—	—	—	12,847	707	6,501	39,246
Kerosene																	
Refinery	365	114	479	0	714	37	298	1,049	80	870	721	31	57	1,759	7	289	3,583
Bulk Terminal	—	—	3,613	—	—	—	—	993	—	—	—	—	—	861	32	62	5,561
Pipeline	—	—	445	—	—	—	—	155	—	—	—	—	—	470	0	1	1,071
Natural Gas Processing Plant	0	0	0	0	0	0	0	0	3	0	0	0	1	4	0	0	4
Total	—	—	4,537	—	—	—	—	2,197	—	—	—	—	—	3,094	39	352	10,219
Distillate Fuel Oils																	
Refinery	7,621	476	8,097	76	7,224	1,515	2,949	11,764	1,061	10,286	4,629	1,650	262	17,888	1,585	4,795	44,129
Bulk Terminal	—	—	54,938	—	—	—	—	20,833	—	—	—	—	—	7,520	690	5,341	89,322
Pipeline	—	—	7,804	—	—	—	—	10,127	—	—	—	—	—	8,369	546	1,041	27,887
Natural Gas Processing Plant	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	1
Total	—	—	70,839	—	—	—	—	42,724	—	—	—	—	—	33,778	2,821	11,177	161,339
Residual Fuel Oils																	
Refinery	3,338	78	3,416	52	1,443	266	199	1,960	367	4,667	2,240	144	30	7,448	455	6,752	20,031
Bulk Terminal	—	—	25,922	—	—	—	—	1,675	—	—	—	—	—	5,003	0	1,822	34,422
Pipeline	—	—	0	—	—	—	—	0	—	—	—	—	—	1	0	8	9
Total	—	—	29,338	—	—	—	—	3,635	—	—	—	—	—	12,452	455	8,582	54,462

See footnotes at end of table.

Table 20. Stocks of Crude Oil and Petroleum Products By PAD District, November 1983 (Thousand Barrels) (continued)

Commodity	PAD District I			PAD District II					PAD District III						PAD Dist. IV	PAD Dist. V	United States
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Daks.	Okla., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	New Mexico	Total	Rocky Mt.	West Coast	
Naphtha < 400 Deg. Petro. Feedstock																	
Refinery	90	0	90	0	162	0	48	210	85	797	368	86	0	1,336	0	161	1,797
Total	90	0	90	0	162	0	48	210	85	797	368	86	0	1,336	0	161	1,797
Other Oils > 400 Deg. Petro. Feedstock																	
Refinery	4	0	4	0	25	0	0	25	261	916	252	0	0	1,429	6	540	2,004
Total	4	0	4	0	25	0	0	25	261	916	252	0	0	1,429	6	540	2,004
Special Naphthas																	
Refinery	31	54	85	0	225	0	177	402	18	1,136	72	121	0	1,347	11	208	2,053
Bulk Terminal	—	—	681	—	—	—	—	195	—	—	—	—	—	23	0	37	936
Natural Gas Processing Plant	0	0	0	0	0	0	0	0	90	0	0	0	0	90	0	0	90
Total	—	—	766	—	—	—	—	597	—	—	—	—	—	1,460	11	245	3,079
Lubricants																	
Refinery	1,142	958	2,100	0	671	0	261	932	35	2,919	1,100	475	0	4,529	64	572	8,197
Bulk Terminal	—	—	1,239	—	—	—	—	1,144	—	—	—	—	—	271	1	633	3,288
Total	—	—	3,339	—	—	—	—	2,076	—	—	—	—	—	4,800	65	1,205	11,485
Waxes																	
Refinery	17	142	159	0	43	0	33	76	20	247	144	92	0	503	0	52	790
Total	—	—	159	—	—	—	—	76	—	—	—	—	—	503	0	52	790
Petroleum Coke																	
Refinery	1,162	0	1,162	0	472	59	95	626	1	315	1,159	173	0	1,648	123	1,947	5,506
Total	1,162	0	1,162	0	472	59	95	626	1	315	1,159	173	0	1,648	123	1,947	5,506
Asphalt and Road Oil																	
Refinery	1,588	35	1,623	236	1,732	1,018	416	3,402	571	451	1,213	622	147	3,004	504	1,382	9,915
Bulk Terminal	—	—	2,663	—	—	—	—	2,683	—	—	—	—	—	337	23	137	5,843
Total	—	—	4,286	—	—	—	—	6,085	—	—	—	—	—	3,341	527	1,519	15,758
Miscellaneous Products																	
Refinery	258	34	292	1	52	16	10	79	28	551	278	67	0	924	6	119	1,420
Bulk Terminal	—	—	126	—	—	—	—	25	—	—	—	—	—	37	0	90	278
Pipeline	—	—	13	—	—	—	—	119	—	—	—	—	—	195	0	0	327
Natural Gas Processing Plant	0	0	0	0	2	0	0	2	85	2	0	2	0	89	1	0	92
Total	—	—	431	—	—	—	—	225	—	—	—	—	—	1,245	7	209	2,117
Total Stocks, All Oils	—	—	225,109	—	—	—	—	271,391	—	—	—	—	—	811,644	29,651	172,478	1,510,273

1 Includes 33,879 thousand barrels of domestic crude oil.
Sources: See Explanatory Notes on Data Collection and Estimation.
— Not Applicable.

Table 21. Movements of Crude Oil and Petroleum Products by Pipeline, Tanker, and Barge Between PAD Districts, November 1983
(Thousand Barrels)

Commodity	From I to			From II to				From III to				From IV to			From V to			
	II	III	V	I	III	IV	V	I	II	IV	V	II	III	V	I	II	III	IV
Crude Oil (Tanker and Barge only)	0	0	0	0	0	0	0	413	1,970	0	0	0	0	0	2,192	0	18,764	0
Petroleum Products	8,242	279	0	3,018	5,445	2,091	211	83,450	29,028	0	1,749	1,666	699	918	0	0	45	0
Natural Gasoline and Isopentane	0	0	0	0	2	0	0	0	400	0	0	10	0	0	0	0	0	0
Unfractionated Stream	0	0	0	0	500	0	0	0	1,100	0	0	601	699	0	0	0	0	0
Plant Condensate	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
Liquefied Petroleum Gases	0	0	0	721	2,354	168	0	2,011	6,520	0	0	272	0	0	0	0	0	0
Unfinished Oils	9	152	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
Motor Gasoline Blending Components	0	0	0	0	0	0	0	108	1,251	0	0	0	0	0	0	0	0	0
Aviation Gasoline Blending Components	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Finished Motor Gasoline	5,664	0	0	1,446	1,868	1,281	0	49,212	11,188	0	978	420	0	671	0	0	0	0
Finished Leaded Motor Gasoline	3,238	0	0	579	1,013	645	0	18,263	4,845	0	581	289	0	450	0	0	0	0
Finished Unleaded Motor Gasoline	2,426	0	0	867	855	636	0	30,949	6,343	0	397	131	0	221	0	0	0	0
Finished Aviation Gasoline	8	0	0	0	0	0	0	198	107	0	0	0	0	0	0	0	0	0
Naphtha-Type Jet Fuel	122	0	0	0	59	0	0	800	0	0	190	79	0	95	0	0	0	0
Kerosene-Type Jet Fuel	278	52	0	78	47	468	0	9,484	1,972	0	133	5	0	32	0	0	0	0
Kerosene	35	0	0	0	0	0	0	658	11	0	0	0	0	0	0	0	0	0
Distillate Fuel Oil	2,048	0	0	455	494	174	0	17,723	5,405	0	376	279	0	120	0	0	0	0
Residual Fuel Oil	0	0	0	60	61	0	211	1,803	0	0	0	0	0	0	0	0	0	0
Naphtha and Other Oils for Petro. Feedstock	0	0	0	0	0	0	0	23	9	0	0	0	0	0	0	0	0	0
Special Naphthas	0	0	0	0	0	0	0	327	197	0	72	0	0	0	0	0	0	0
Lubricants	0	46	0	37	21	0	0	751	340	0	0	0	0	0	0	0	0	0
Waxes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Asphalt and Road Oil	0	0	0	98	0	0	0	166	371	0	0	0	0	0	0	0	0	0
Miscellaneous Products	78	29	0	123	39	0	0	184	156	0	0	0	0	0	0	0	0	0
Total All Products	8,242	279	0	3,018	5,445	2,091	211	83,863	30,998	0	1,749	1,666	699	918	2,192	0	18,809	0

Sources: See Explanatory Notes on Data Collection and Estimation.

Table 22. Movements of Petroleum Products by Pipeline between PAD Districts, November 1983
(Thousand Barrels)

Commodity	From I to		From II to			From III to				From IV to			From V to	
	II	III	I	III	IV	I	II	IV	V	II	III	V	III	IV
Natural Gasoline and Isopentane	0	0	0	2	0	0	400	0	0	10	0	0	0	0
Unfractionated Stream	0	0	0	500	0	0	1,100	0	0	601	699	0	0	0
Plant Condensate	0	0	0	0	0	0	1	0	0	0	0	0	0	0
Liquefied Petroleum Gases	0	0	721	2,354	168	1,796	6,520	0	0	272	0	0	0	0
Motor Gasoline Blending Components	0	0	0	0	0	0	1,251	0	0	0	0	0	0	0
Aviation Gasoline Blending Components	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Finished Motor Gasoline	3,964	0	1,262	1,851	1,281	36,860	10,590	0	978	420	0	671	0	0
Finished Leaded Motor Gasoline	2,223	0	504	1,003	645	13,582	4,534	0	581	289	0	450	0	0
Finished Unleaded Motor Gasoline	1,741	0	758	848	636	23,278	6,056	0	397	131	0	221	0	0
Finished Aviation Gasoline	8	0	0	0	0	17	76	0	0	0	0	0	0	0
Naphtha-Type Jet Fuel	0	0	0	59	0	461	0	0	190	79	0	95	0	0
Kerosene-Type Jet Fuel	149	0	67	47	468	6,829	1,794	0	133	5	0	32	0	0
Kerosene	29	0	0	0	0	582	1	0	0	0	0	0	0	0
Distillate Fuel Oil	1,606	0	410	484	174	14,201	4,894	0	376	279	0	120	0	0
Residual Fuel Oil	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Miscellaneous Products	0	0	107	0	0	0	0	0	0	0	0	0	0	0
Total	5,756	0	2,567	5,297	2,091	60,746	26,627	0	1,677	1,666	699	918	0	0

Source: See Explanatory Notes on Data Collection and Estimation.

Table 23. Movements of Crude Oil and Petroleum Products by Tanker and Barge Between PAD Districts, November 1983
(Thousand Barrels)

Commodity	From I to			From II to			From III to						From V to		
	II	III	V	I	III	V	I	New Eng	Cent Atl	Low Atl	II	V	I	II	III
Crude Oil	0	0	0	0	0	0	413	0	413	0	1,970	0	2,192	0	18,764
Petroleum Products	2,486	279	0	451	148	211	22,704	1,205	4,621	16,878	2,401	72	0	0	45
Liquefied Petroleum Gases	0	0	0	0	0	0	215	0	0	215	0	0	0	0	0
Unfinished Oils	9	152	0	0	0	0	2	0	2	0	0	0	0	0	0
Motor Gasoline Blending Components	0	0	0	0	0	0	108	0	0	108	0	0	0	0	0
Finished Motor Gasoline	1,700	0	0	184	17	0	12,352	239	1,050	11,063	598	0	0	0	0
Finished Aviation Gasoline	0	0	0	0	0	0	181	0	85	96	31	0	0	0	0
Naphtha-Type Jet Fuel	122	0	0	0	0	0	339	0	68	271	0	0	0	0	0
Kerosene-Type Jet Fuel	129	52	0	11	0	0	2,655	119	906	1,630	178	0	0	0	0
Kerosene	6	0	0	0	0	0	76	0	32	44	10	0	0	0	0
Distillate Fuel Oil	442	0	0	45	10	0	3,522	652	630	2,240	511	0	0	0	0
Residual Fuel Oil	0	0	0	60	61	211	1,803	154	1,031	618	0	0	0	0	0
Naphtha and Other Oils for Petro. Feed. Use	0	0	0	0	0	0	23	0	0	23	9	0	0	0	0
Special Naphthas	0	0	0	0	0	0	327	32	158	137	197	72	0	0	0
Lubricants	0	46	0	37	21	0	751	0	561	190	340	0	0	0	0
Waxes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Asphalt and Road Oil	0	0	0	98	0	0	166	0	0	166	371	0	0	0	0
Miscellaneous Products	78	29	0	16	39	0	184	9	98	77	156	0	0	0	45
Total	2,486	279	0	451	148	211	23,117	1,205	5,034	16,878	4,371	72	2,192	0	18,809

Source: See Explanatory Notes on Data Collection and Estimation.

Table 24. Net Movements of Crude Oil and Petroleum Products by Pipeline, Tanker and Barge Between PAD Districts, November 1983
(Thousand Barrels)

Commodity	PAD District I			PAD District II			PAD District III			PAD District IV			PAD District V		
	Receipts into PADD I	Shipments from PADD I	Net Receipts PADD I	Receipts into PADD II	Shipments from PADD II	Net Receipts PADD II	Receipts into PADD III	Shipments from PADD III	Net Receipts PADD III	Receipts into PADD IV	Shipments from PADD VI	Net Receipts PADD IV	Receipts into PADD V	Shipments from PADD V	Net Receipts PADD V
Crude Oil (Tanker and Barge only)	2,605	0	2,605	1,970	0	1,970	18,764	2,383	16,381	0	0	0	0	20,956	-20,956
Petroleum Products	86,468	8,521	77,947	38,936	10,765	28,171	6,468	114,227	-107,759	2,091	3,283	-1,192	2,878	45	2,833
Natural Gasoline	0	0	0	410	2	408	2	400	-398	0	10	-10	0	0	0
Unfractionated Stream	0	0	0	1,701	500	1,201	1,199	1,100	99	0	1,300	-1,300	0	0	0
Plant Condensate	0	0	0	1	0	1	0	1	-1	0	0	0	0	0	0
Liquefied Petroleum Gases	2,732	0	2,732	6,792	3,243	3,549	2,354	8,531	-6,177	168	272	-104	0	0	0
Unfinished Oils	2	161	-159	9	0	9	152	2	150	0	0	0	0	0	0
Motor Gasoline Blending Components	108	0	108	1,251	0	1,251	0	1,359	-1,359	0	0	0	0	0	0
Aviation Gasoline Blending Components	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Finished Motor Gasoline	50,658	5,664	44,994	17,272	4,595	12,677	1,868	61,378	-59,510	1,281	1,091	190	1,649	0	1,649
Finished Leaded Motor Gasoline	18,842	3,238	15,604	8,372	2,237	6,135	1,013	23,689	-22,676	645	739	-94	1,031	0	1,031
Finished Unleaded Motor Gasoline	31,816	2,426	29,390	8,900	2,358	6,542	855	37,689	-36,834	636	352	284	618	0	618
Finished Aviation Gasoline	198	8	190	115	0	115	0	305	-305	0	0	0	0	0	0
Naphtha-Type Jet Fuel	800	122	678	201	59	142	59	990	-931	0	174	-174	285	0	285
Kerosene-Type Jet Fuel	9,562	330	9,232	2,255	593	1,662	99	11,589	-11,490	468	37	431	165	0	165
Kerosene	658	35	623	46	0	46	0	669	-669	0	0	0	0	0	0
Distillate Fuel Oil	18,178	2,048	16,130	7,732	1,123	6,609	494	23,504	-23,010	174	399	-225	496	0	496
Residual Fuel Oil	1,863	0	1,863	0	332	-332	61	1,803	-1,742	0	0	0	211	0	211
Naphtha and Other Oils for Petro. Feedstock Use	23	0	23	9	0	9	0	32	-32	0	0	0	0	0	0
Special Naphthas	327	0	327	197	0	197	0	596	-596	0	0	0	72	0	72
Lubricants	788	46	742	340	58	282	67	1,091	-1,024	0	0	0	0	0	0
Waxes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Asphalt and Road Oil	264	0	264	371	98	273	0	537	-537	0	0	0	0	0	0
Miscellaneous Products	307	107	200	234	162	72	113	340	-227	0	0	0	0	45	-45
Total All Products	89,073	8,521	80,552	40,906	10,765	30,141	25,232	116,610	-91,378	2,091	3,283	-1,192	2,878	21,001	-18,123

Sources: See Explanatory Notes on Data Collection and Estimation.

Table 25. Production of Residual Fuel Oil By Sulfur Content, November 1983
(Thousand Barrels)

Commodity	PAD District I			PAD District II					PAD District III						PAD Dist. IV	PAD Dist. V	United States
	East Coast	Appala-chian #1	Total	Appala-chian #2	Ind., Ill., Ky.	Minn., Wisc., Daks.	Okla., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	New Mexico	Total	Rocky Mt.	West Coast	
Residual Fuel Oil	2,725	151	2,876	98	1,426	262	309	2,095	612	6,405	3,484	256	63	10,820	338	9,325	25,454
0.00 to 0.30% Sulfur	551	45	596	0	79	0	96	175	14	317	248	76	6	661	79	880	2,391
0.31 to 1.00% Sulfur	1,973	0	1,973	-17	384	0	122	489	489	1,474	796	115	0	2,874	98	2,575	8,009
Greater Than 1.00% Sulfur	201	106	307	115	963	262	91	1,431	109	4,614	2,440	65	57	7,285	161	5,870	15,054

Source: See Explanatory Notes on Data Collection and Estimation.

Table 26. Stocks of Residual Fuel Oil By Sulfur Content, November 1983
(Thousand Barrels)

Commodity	PAD District I			PAD District II					PAD District III						PAD Dist. IV	PAD Dist. V	United States
	East Coast	Appala-chian #1	Total	Appala-chian #2	Ind., Ill., Ky.	Minn., Wisc., Daks.	Okla., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	New Mexico	Total	Rocky Mt.	West Coast	
Residual Fuel Oil — 0.00 to 0.30% Sulfur																	
Refinery	494	35	529	0	120	0	110	230	23	271	143	13	2	452	142	244	1,597
Bulk Terminal	—	—	6,786	—	—	—	—	67	—	—	—	—	—	54	0	24	6,931
Total	—	—	7,315	—	—	—	—	297	—	—	—	—	—	506	142	268	8,528
Residual Fuel Oil — 0.31 to 1.00% Sulfur																	
Refinery	1,579	4	1,583	0	448	0	43	491	235	1,155	968	64	0	2,422	101	2,694	7,291
Bulk Terminal	—	—	9,463	—	—	—	—	649	—	—	—	—	—	2,800	0	572	13,484
Total	—	—	11,046	—	—	—	—	1,140	—	—	—	—	—	5,222	101	3,266	20,775
Residual Fuel Oil — Greater than 1.00% Sulfur																	
Refinery	1,265	39	1,304	52	875	266	46	1,239	109	3,241	1,129	67	28	4,574	212	3,814	11,143
Bulk Terminal	—	—	9,673	—	—	—	—	959	—	—	—	—	—	2,149	0	1,226	14,007
Total	—	—	10,977	—	—	—	—	2,198	—	—	—	—	—	6,723	212	5,040	25,150

Sources: See Explanatory Notes on Data Collection and Estimation.
— Not Applicable

Table 27. Movements of Residual Fuel Oil by Tanker and Barge Between PAD Districts, By Sulfur Content, November 1983
(Thousand Barrels)

Commodity	From I to			From II to			From III to						From V to		
	II	III	V	I	III	V	I	New Eng	Cent Atl	Low Atl	II	V	I	II	III
Residual Fuel Oil	0	0	0	60	61	211	1,803	154	1,031	618	0	0	0	0	0
0.00 to 0.30% Sulfur	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0
0.31 to 1.00% Sulfur	0	0	0	0	0	0	325	0	216	109	0	0	0	0	0
Greater Than 1.00% Sulfur	0	0	0	60	61	211	1,475	154	815	506	0	0	0	0	0

Source: See Explanatory Notes on Data Collection and Estimation.

Table 28. Imports of Residual Fuel Oil by Sulfur Content by Country of Origin, November 1983
(Thousand Barrels)

Country	Residual Fuel Oil			
	0.00 to 0.30%	0.31 to 1.00%	Greater Than 1.00%	Total
Arab OPEC				
Algeria	1,405	635	0	2,040
Iraq	0	0	0	0
Kuwait	0	0	513	513
Libya	0	0	0	0
Qatar	0	0	0	0
Saudi Arabia	0	0	0	0
United Arab Emirates	519	0	0	519
Subtotal Arab OPEC	1,923	635	513	3,072
Other OPEC				
Ecuador	0	0	192	192
Gabon	0	0	0	0
Indonesia	0	26	124	150
Iran	0	0	0	0
Nigeria	0	0	0	0
Venezuela	1,117	321	2,462	3,900
Subtotal Other OPEC	1,117	347	2,778	4,242
Other				
Angola	0	0	0	0
Australia	0	0	0	0
Bahamas	1,306	188	0	1,494
Bolivia	0	0	0	0
Brazil	334	0	0	334
Brunei	0	0	0	0
Canada	160	257	255	672
Congo	0	0	0	0
Egypt	0	0	0	0
France	0	0	0	0
Ghana	0	0	0	0
Liberia	0	0	0	0
Malaysia	0	0	0	0
Mexico	0	0	473	473
Netherlands	(s)	361	0	361
Netherlands Antilles	0	233	1,926	2,158
Norway	0	0	0	0
Oman	0	0	0	0
People's Republic of China	0	0	0	0
Peru	796	523	473	1,792
Puerto Rico	0	0	0	0
Romania	0	0	0	0
Spain	0	178	0	178
Syria	0	0	0	0
Trinidad	0	0	320	320
Tunisia	0	0	0	0
United Kingdom	0	0	0	0
Virgin Islands	1,668	3,650	1,686	7,005
Yugoslavia	0	0	0	0
Zaire	0	0	0	0
Other Western Hemisphere	0	43	636	679
Other Eastern Hemisphere	384	80	73	537
Subtotal Other	4,648	5,514	5,841	16,003
Total Imports	7,689	6,496	9,132	23,317

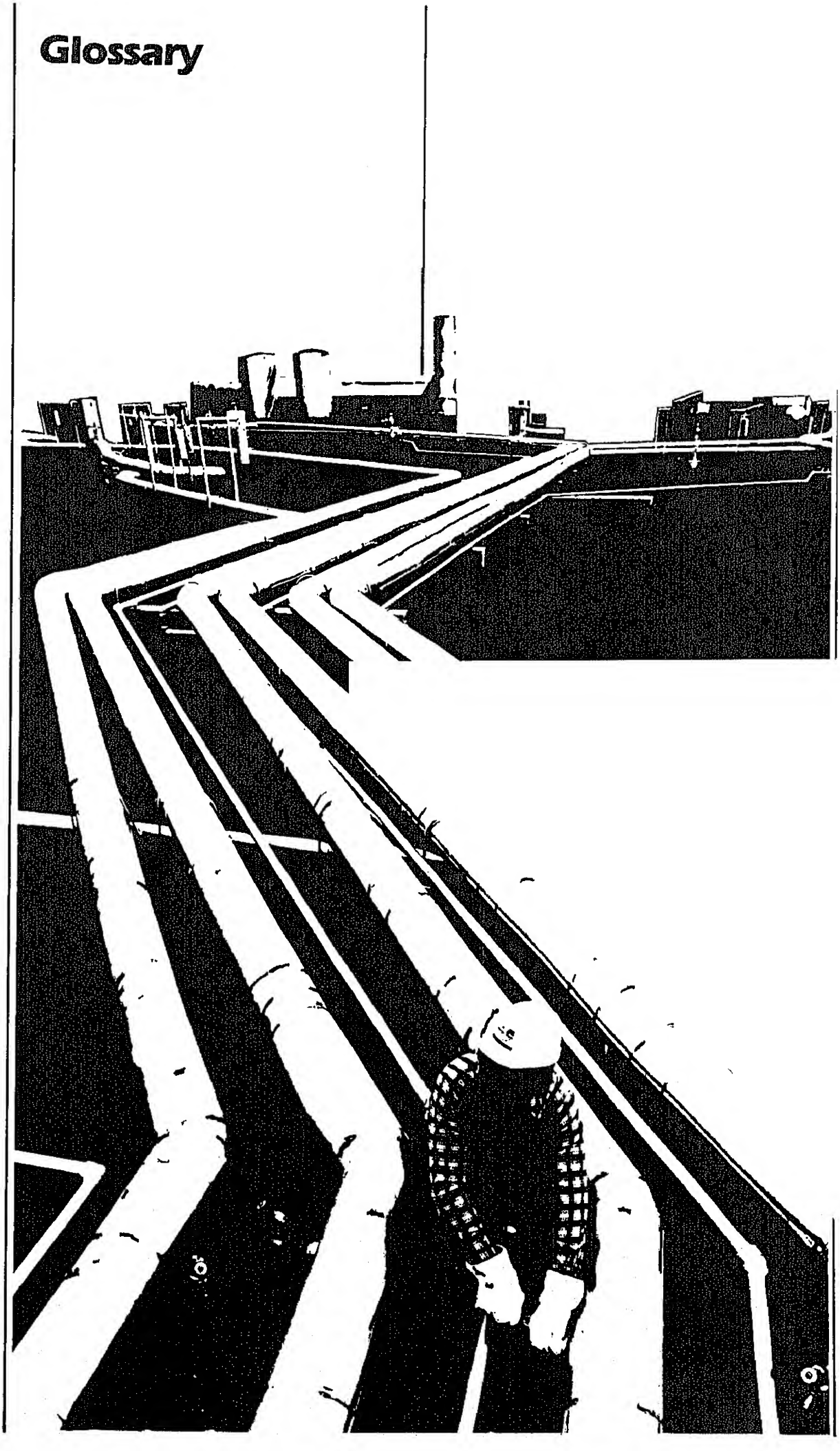
(s) Less than 500 barrels.
Note: Total may not equal sum of components due to independent rounding.
Sources: See Explanatory Notes on Data Collection and Estimation.

Table 29. Imports of Residual Fuel Oil by Sulfur Content by State of Entry, November 1983
(Thousand Barrels)

State	Residual Fuel Oil			
	0.00 to 0.30%	0.31 to 1.00%	Greater Than 1.00%	Total
PAD District I	**6,920**	**5,917**	**8,109**	**20,946**
Connecticut	0	390	0	390
Delaware	0	0	187	187
Florida	0	763	233	997
Georgia	0	0	49	49
Maine	0	188	766	955
Maryland	0	105	162	267
Massachusetts	191	361	1,251	1,803
New Hampshire	0	0	219	219
New Jersey	761	774	580	2,114
New York	5,639	2,217	3,635	11,491
Pennsylvania	320	1,119	263	1,702
Rhode Island	0	0	50	50
South Carolina	0	0	124	124
Vermont	9	0	0	9
Virginia	0	0	590	590
PAD District II	**131**	**118**	**98**	**346**
Illinois	0	118	0	118
Michigan	79	0	51	130
Minnesota	15	0	21	36
North Dakota	1	0	26	27
Wisconsin	35	0	0	35
PAD District III	**620**	**355**	**513**	**1,487**
Louisiana	205	34	0	238
Texas	415	321	513	1,249
PAD District IV	**11**	**0**	**17**	**28**
Montana	11	0	17	28
PAD District V	**7**	**106**	**397**	**509**
California	1	0	200	201
Hawaii	0	106	197	302
Washington	6	0	0	6
All PAD Districts	**7,689**	**6,496**	**9,132**	**23,317**

Note: Total may not equal sum of components due to independent rounding.
Sources: See Explanatory Notes on Data Collection and Estimation.

Glossary



Definitions of Petroleum Products and Other Terms

Alcohol. The family name of a group of organic chemical compounds composed of carbon, hydrogen, and oxygen. The series of molecules vary in chain length and are composed of a hydrocarbon plus a hydroxyl group; CH-(CH)n-OH. *Alcohol* includes methanol and ethanol.

Alkylation. A refinery process for chemically combining isoparaffin with olefin hydrocarbons. The product, alkylate, has high octane value and is blended with motor and aviation gasoline to improve the antiknock value of the fuel.

API Gravity. An arbitrary scale expressing the gravity or density of liquid petroleum products. The measuring scale is calibrated in terms of degrees API; it may be calculated in terms of the following formula:

$$\text{Deg API} = \frac{141.5}{\text{sp gr 60F/60F}} - 131.5$$

Aromatics. Hydrocarbons characterized by unsaturated ring structures of carbon atoms. Commercial petroleum aromatics are benzene, toluene, and xylene.

Asphalt. A dark-brown-to-black cement-like material, containing bitumens as the predominant constituents, obtained by petroleum processing. The definition includes crude asphalt as well as the following finished products: cements, fluxes, the asphalt content of emulsions (exclusive of water), and petroleum distillates blended with asphalt to make cutback asphalts. The conversion factor for asphalt is 5.5 barrels of 42 U.S. gallons per short ton.

ASTM. The acronym for the American Society for Testing and Materials.

Aviation Gasoline Blending Components. Finished components in the gasoline range which will be used for blending or compounding into finished aviation gasoline.

Aviation Gasoline, Finished. All special grades of gasoline for use in aviation reciprocating engines, as given in ASTM Specification D910 and Military Specification MIL-G-5572. Excludes blending components which will be used in blending or compounding into finished aviation gasoline.

Barrel. A volumetric unit of measure for crude oil and petroleum products equivalent to 42 U.S. gallons. This measure is used in most statistical reports. Factors for converting petroleum coke, asphalt and wax to barrels are given in the definitions for these products.

Barrels per Calendar Day. The maximum number of barrels of input that can be processed in a twenty-four hour period after making allowances for the following limitations: downstream limitations, environmental constraints, types and grades of inputs, planned and unplanned downtime, and types and grades of products.

Barrels Per Stream Day. The amount a unit can process running at full capacity under optimal crude and product slate conditions.

Bi-metallic. A term used to describe a type of catalyst. A catalytic process utilizing a catalyst comprised of two metals (e.g., platinum, rhenium).

Butane. A normally gaseous paraffinic hydrocarbon, C4H10. It is extracted from natural gas or refinery gas streams. Butane is covered by ASTM Specification D1835 and Gas Processors Association Specification for commercial butane.

> ***Isobutane.*** A saturated straight-chain hydrocarbon of butane. It is a colorless paraffinic gas that boils at a temperature of 10.9 degrees F. This classification includes mixtures of gases that contain 80 percent liquid volume or more isobutane. It is extracted from natural gas and refinery gas streams.
>
> ***Normal Butane.*** A saturated straight-chain hydrocarbon of butane. It is a colorless paraffinic gas that boils at a temperature of 31.1 degrees F. This classification includes mixtures of gases that contain 80 percent or more normal butane.
>
> ***Other Butanes.*** All butanes not included as normal butane or isobutane.

Butane-Propane Mixtures. Mixtures consisting exclusively of butane and propane that conform to ASTM Specification D1835 and Gas Processors Association Specification for commercial butane-propane mixtures. They are extracted from natural gas and refinery gas streams.

Butylene. An olefinic hydrocarbon, C4H8, recovered from refinery processes.

Catalytic Cracking. The refining process of breaking down the larger, heavier, and more complex hydrocarbon molecules into simpler and lighter molecules. Catalytic cracking is accomplished by the use of a catalytic agent and is an effective process for increasing the yield of gasoline from crude oil.

Catalytic Hydrocracking. A refining process for converting middle boiling or residual material to high-octane gasoline, reformer charge stock, jet fuel and/or high grade fuel oil. Hydrocracking is an efficient, relatively low temperature process using hydrogen and a catalyst.

Catalytic Hydrotreating. A process for treating petroleum fractions (e.g., distillate fuel oil and residual fuel oil) and unfinished oils (e.g., naphthas, reformer feeds and heavy gas oil) in the presence of catalysts and substantial quantities of hydrogen to upgrade their quality.

Catalytic Reforming. The use of controlled heat and pressure with catalysts to effect the rearrangement of certain hydrocarbon molecules without altering their composition appreciably; the conversion of low-octane

gasoline fractions into higher octane stocks suitable for blending into finished gasoline; also the conversion of naphthas to obtain a more volatile product of higher octane number.

Conventional. A term used to describe a type of catalyst. A catalytic process utilizing a catalyst comprised of a metal and a non-metal (e.g., platinum, alumina).

Coal. A generic term applied to carbonaceous rocks that were formed by the partial or complete decomposition of vegetation. These stratified carbonaceous rocks are either solid or brittle and are highly combustible. Includes lignite, bituminous coal, and anthracite coal which conform to ASTM Specification D388.

Crude Distillation. The refining process of separating crude oil components by heating and subsequent condensing of the fractions by cooling.

Crude Oil (Including Lease Condensate). A mixture of hydrocarbons that existed in liquid phase in underground reservoirs and remains liquid at atmospheric pressure after passing through surface separating facilities. Included are lease condensate and liquid hydrocarbons produced from tar sands, gilsonite and oil shale. Drip gas is also included, but topped crude oil (residual oil) and other unfinished oils are excluded. Liquids produced at natural gas processing plants and mixed with crude oil are likewise excluded where identifiable. Crude oil is considered as either domestic or foreign according to the following:

> ***Domestic.*** Crude oil produced in the United States or from its outer continental shelf as defined in 43 U.S.C. 1331.
>
> ***Foreign.*** Crude oil produced outside the United States.

Delayed Coking. A process to produce low Conradson carbon gas for catalytic cracking feedstock and for gasoline.

Distillate Fuel Oil. A general classification for one of the petroleum fractions produced in conventional distillation operations. It is used primarily for space heating, on-and-off-highway diesel engine fuel (including railroad engine fuel and fuel for agricultural machinery), and electric power generation. Included are products known as No. 1, No. 2, and No. 4 fuel oils; No. 1, No. 2, and No. 4 diesel fuel.

No. 1 Fuel Oil. A light distillate fuel oil intended for use in vaporizing pot-type burners. ASTM Specification D396 specifies for this grade maximum distillation temperatures of 420 degrees F. at the 10-percent point and 550 degrees F. at the 90-percent point, and kinematic viscosities between 1.4 and 2.2 centistokes at 100 degrees F.

No. 2 Fuel Oil. A distillate fuel oil for use in atomizing-type burners for domestic heating or for moderate capacity commercial-industrial burner units. ASTM Specification D396 specifies for this grade distillation temperatures at the 90-percent point between 540 degrees and 640 degrees F., and kinematic viscosities between 2.0 and 3.6 centistokes at 100 degrees F.

No. 1 and No. 2 Diesel Fuel Oils. Distillate fuel oils used in compression-ignition engines, as given by ASTM Specification D975:

> ***No. 1-D.*** A volatile distillate fuel oil with a boiling range between 300-575 degrees F. and used in high-speed diesel engines generally operated under wide variations in speed and load. Includes type C-B diesel fuel used for city buses and similar operations. Properties are defined in ASTM Specifications D975.
>
> ***No. 2-D.*** A gas oil type distillate of lower volatility with distillation temperatures at the 90-percent point between 540-640 degrees F. for use in high-speed diesel engines generally operated under uniform speed and load conditions. Includes Type R-R diesel fuel used for railroad locomotive engines, and Type T-T for diesel-engine trucks. Properties are defined in ASTM Specification D975.

No. 4 Fuel Oil. A fuel oil for commercial burner installations not equipped with preheating facilities. It is used extensively in industrial plants. This grade is a blend of distillate fuel oil and residual fuel oil stocks that conforms to ASTM Specification D396 or Federal Specification VV-F-815C; its kinematic viscosity is between 5.8 and 26.4 centistokes at 100 degrees F. Also included is No. 4-D, a fuel oil for low- and medium-speed diesel engines that conforms to ASTM Specification D975.

Eastern Hemisphere. That half of the earth east of the Atlantic Ocean which includes Europe, Asia, Africa, and Australia. The Hawaiian Foreign Trade Zone is in this hemisphere.

Electric Energy (Purchased). Electricity purchased for refinery operations that is not produced within the refinery complex.

Ethane. A normally gaseous paraffinic compound (C_2H_6) extracted from natural gas and refinery gas streams. "Ethane" includes any products containing 90 percent liquid volume or more ethane.

Ethane-Propane Mixtures. Mixtures of ethane and propane in which neither component is 90 percent or more of the liquid volume. It is extracted from natural gas and refinery gas streams.

Ethylene. An olefinic hydrocarbon, (C_2H_4) recovered from refinery or petrochemical processes.

Field Production. Represents crude oil production on leases, natural gas liquids production at natural gas processing plants, and new supply of other hydrocarbons and alcohol.

Fluid Coking. A thermal process utilizing the fluidized-solids technique for continuous conversion of heavy, low-grade oils into lighter products.

Gasoline Blending Components. Finished components in the gasoline range which will be used for blending or compounding into finished aviation or motor gasoline.

Gas Oil. A liquid petroleum distillate having a viscosity intermediate between that of kerosene and lubricating oil. Derives its name from having originally been used in the manufacture of illuminating gas. Now supplies distillate-type fuel oils and diesel fuel, also cracked to produce gasoline.

Imported Crude Oil Burned as Fuel. The amount of foreign crude oil burned as a fuel oil, usually as residual fuel oil, without being processed as such. *Imported crude oil burned as fuel* includes lease condensate and liquid hydrocarbons produced from tar sand oil, gilsonite, and oil shale.

Isomerization. A refining process which alters the fundamental arrangement of atoms in the molecule. Used to convert normal butane into isobutane, an alkylation process feedstock, and normal pentane and hexane into isopentane and isohexane, high-octane gasoline components.

Kerosene. A petroleum distillate that boils at a temperature between 300-550 degrees F., that has a flash point higher than 100 degrees F. by ASTM Method D56, that has a gravity range from 40-46 degrees API, and that has a burning point in the range of 150-175 degrees F. Included are the two classifications recognized by ASTM D-3699: No. 1-K and No. 2-K, and all grades of kerosene called range or stove oil which have properties similar to No. 1 fuel oil, but with a gravity of about 43 degrees API and a maximum end-point of 625 degrees F. Kerosene is used in space heaters, cook stoves, and water heaters and is suitable for use as an illuminant when burned in wick lamps.

Kerosene-Type Jet Fuel. A quality kerosene product with an average gravity of 40.7 degrees API, a 10 percent distillation temperature of 400 degrees F. It is covered by ASTM Specification D1655 and Military Specifications MIL-T-5624L (Grades JP-5 and JP-8). A relatively low-freezing point distillate of the kerosene type; it is used primarily for commercial turbojet and turboprop aircraft engines.

Lease Condensate. A natural gas liquid recovered from gas well gas (associated and non-associated) in lease separators or natural gas field facilities. Lease condensate consists primarily of pentanes and heavier hydrocarbons.

Liquefied Petroleum Gases (LPG). Propane, propylene, butanes, butylene, butane-propane mixtures, ethane-propane mixtures, and isobutane produced at refineries or natural gas processing plants, including plants that fractionate raw natural gas plant liquids.

Liquefied Refinery Gases (LRG). Liquefied petroleum gases fractionated from refinery or still gases. Through compression and/or refrigeration they are retained in the liquid state. The reported categories are ethane and/or ethylene, propane and/or propylene, butane and/or butylene, butane-propane mixtures, and isobutane. Excludes still gases used for chemical or rubber manufacture which are reported as a petrochemical feedstock and also excludes liquefied gases ready for blending into gasoline which are reported as gasoline blending components. Liquefied refinery gases are reported for use as petrochemical feedstocks or other uses.

Lubricating Oils. A substance used to reduce friction between bearing surfaces. Petroleum lubricants may be produced either from distillates or residues. Other substances may be added to impart or improve certain required properties. *Lubricants* includes all grades of lubricating oils from spindle oil to cylinder oil and those used in greases. The three categories include Bright Stock, Neutral, and Other.

> ***Bright Stock.*** A refined, high viscosity lubricating oil base stock that is usually made from residuum by a treatment such as deasphalting, acid treatment, or solvent extraction.
>
> ***Neutral.*** A distillate lubricating oil base stock with a viscosity that is usually not above 550 Saybolt Universal Seconds (SUS) at 100 degrees F. It is prepared by a treatment such as hydrofining, acid treatment, or solvent extraction.
>
> ***Other.*** A lubricating oil base stock used in finished lubricating oils and greases, including black, coastal, and red oils.

Middle Distillates. A general classification that includes distillate fuel oil and kerosene.

Miscellaneous Products. Includes all finished products not classified elsewhere, e.g., petrolatum, absorption oils, ram-jet fuel, petroleum rocket fuels, synthetic natural gas feedstocks, specialty oils and medicinal oils.

Motor Gasoline Blending Components. Finished components in the gasoline range which will be used for blending or compounding into finished motor gasoline. Pool gasoline is included in this category.

Motor Gasoline, Finished. A complex mixture of relatively volatile hydrocarbons, with or without small quantities of additives, that have been blended to form a fuel suitable for use in spark-ignition engines. Specifications for motor gasoline, as given in ASTM Specification D439 or Federal Specification VV-G-1690B, include a boiling range of 122 degrees to 158 degrees F. at the 10-percent point to 365 degrees to 374 degrees F. at the 90-percent point and a Reid vapor pressure range from 9 to 15 psi. *Motor gasoline* includes finished leaded gasoline, finished unleaded gasoline, and gasohol. Blendstock is excluded until blending has been completed. Alcohol that is to be used in the blending of gasohol is also excluded.

Finished Leaded Gasoline. Contains more than 0.05 gram of lead per gallon or more than 0.005 gram of phosphorus per gallon. The actual lead content of any given gallon, however, may vary as a function of the size of the producer and company according to specific Environmental Protection Agency waiver provisions. Premium and regular grades are included, depending on the octane rating. Includes leaded gasohol. Blendstock is excluded until blending has been completed. Alcohol that is to be used in the blending of gasohol is also excluded.

Finished Unleaded Gasoline. Contains not more than 0.05 gram of lead per gallon and not more than 0.005 gram of phosphorus per gallon. Premium and regular grades are included, depending on the octane rating. Includes unleaded gasohol. Blend stock is excluded until blending has been completed. Alcohol that is to be used in the blending of gasohol is also excluded.

Gasohol. A blend of finished motor gasoline (leaded or unleaded) and alcohol (generally ethanol but sometimes methanol) in which 10 percent or more of the product is alcohol.

Motor Gasoline, Total. Includes finished leaded motor gasoline, finished unleaded motor gasoline, motor gasoline blending components, and gasohol.

Naphtha-Type Jet Fuel. A fuel in the heavy naphtha boiling range with an average gravity of 52.8 degrees API and 20 to 90 percent distillation temperatures of 290 degrees to 470 degrees F., meeting Military Specification MIL-T-5624L (Grade JP-4). JP-4 is used for turbojet and turboprop aircraft engines, primarily by the military. Excludes ram-jet and petroleum rocket fuels.

Natural Gas. A mixture of hydrocarbons and small quantities of various nonhydrocarbons existing in the gaseous phase or in solution with crude oil in underground reservoirs.

Natural Gas Field Facility. A field facility designed to process natural gas produced from more than one lease for the purpose of recovering condensate from a stream of natural gas; however, some field facilities are designed to recover propane, butane, natural gasoline, etc., and to control the quality of natural gas to be marketed.

Natural Gas Plant Liquids. Natural gas liquids recovered from natural gas in gas processing plants, and in some situations, from natural gas field facilities. Natural gas liquids extracted by fractionators are also included. These liquids are defined according to the published specifications of the Gas Processors Association and the American Society for Testing and Materials, and are classified as follows: Ethane, propane, ethane-propane mix, isobutane, butane, butane-propane mix, isopentane, natural gasoline, plant condensate, unfractionated stream, and other products from natural gas processing plants (i.e., products meeting the standards of finished petroleum products produced at natural gas processing plants, such as finished motor gasoline, finished aviation gasoline, special naphthas, kerosene, distillate fuel oil, and miscellaneous products).

Natural Gasoline and Isopentane. A mixture of hydrocarbons, mostly pentanes and heavier, extracted from natural gas, that meets vapor pressure, end-point, and other specifications for natural gasoline set by the Gas Processors Association. Includes isopentane which is a saturated branch-chain hydrocarbon, C5H12, obtained by fractionation of natural gasoline or isomerization of normal pentane.

OPEC. The acronym for the Organization of Petroleum Exporting Countries, oil-producing and exporting countries that have organized for the purpose of negotiating with oil companies on matters of oil production, prices, and future concession rights. Current members are Algeria, Ecuador, Gabon, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, United Arab Emirates, and Venezuela.

Operable Distillation Capacity. The maximum amount of input that can be processed by a crude oil distillation unit in a 24-hour period, making allowances for processing limitations due to types and grades of inputs, limitations of downstream facilities, scheduled and unscheduled downtimes, and environmental constraints. Includes any shutdown capacity that could be placed in operation within 90 days.

Other Hydrocarbons. Materials received by a refinery and consumed as raw materials. Includes hydrogen, coal tar derivatives, gilsonite, and natural gas received by the refinery for reforming into hydrogen. Natural gas to be used as fuel is excluded.

Petrochemical Feedstock Use. Chemical feedstocks derived from petroleum, principally for the manufacture of chemicals, synthetic rubber, and a variety of plastics. The categories reported are *Naphtha-less than 400 degrees F. end-point* and *Other oils-over 400 degrees F. end-point.*

Naphtha-Less Than 400 Degrees F. End-Point. A naphtha with an end point of less than 400 degrees F. that is reported as used as a petrochemical feedstock.

Other Oils-Over 400 Degrees F. End-Point. Oils with an end point over 400 degrees F. that is reported as used as a petrochemical feedstock.

Petroleum Coke. A residue, the final product of the condensation process in cracking. This product is reported as marketable coke or catalyst coke. The conversion factor is five barrels of 42 U.S. gallons per short ton.

Marketable Coke. Those grades of coke produced in delayed or fluid cokers which may be recovered as relatively pure carbon. This *green* coke may be sold or further purified by calcining.

Catalyst Coke. In many catalytic operations (i.e., catalytic cracking) carbon is deposited on the catalyst, thus deactivating the catalyst. The catalyst is reactivated by burning off the carbon, which is used as a fuel in the refinery process. This carbon or coke is not recoverable in a concentrated form.

Petroleum Products. Petroleum products are obtained from the processing of crude oil (including lease condensate), natural gas, and other hydrocarbon compounds. Petroleum products include unfinished oils, natural gasoline and isopentane, plant condensate, unfractionated stream, liquefied petroleum gases, aviation gasoline, motor gasoline, naphtha-type jet fuel, kerosene-type jet fuel, kerosene, distillate fuel oil, residual fuel oil, naphtha less than 400° F. end-point, other oils-over 400° F. end-point, special naphthas, lubricants, waxes, petroleum coke, asphalt, road oil, still gas, and miscellaneous products.

Petroleum Refinery. An installation that manufactures finished petroleum products from crude oil, unfinished oils, natural gas liquids, other hydrocarbons, and alcohol.

Plant Condensate. One of the natural gas liquids, mostly pentanes and heavier hydrocarbons, recovered and separated as liquids at gas inlet separators or scrubbers in processing plants.

Primary Stocks. Stocks of crude oil or petroleum products held in storage at (or in) leases, refineries, natural gas processing plants, pipelines, tankfarms, and bulk terminals that can store at least 50,000 barrels of petroleum products or that can receive petroleum products by tanker, barge, or pipeline. Crude oil that is in transit from Alaska, or that is stored on Federal leases or in the Strategic Petroleum Reserve is included. *Primary Stocks* excludes stocks of foreign origin that are held in bonded warehouse storage.

Propane. A normally gaseous paraffinic compound, C_3H_8, which includes all products covered by NGPA Specification for commercial and HD-5 propane and ASTM Specification D1835. It is used primarily as a fuel and as a petrochemical feedstock.

Propylene. An olefinic hydrocarbon, C_3H_6, recovered from refinery or petrochemical processes.

Residual Fuel Oil. The topped crude of refinery operation which includes No. 5 and No. 6 fuel oils as defined in ASTM Specification D396 and Federal Specification VV-F-815C, Navy Special fuel oil as defined in Military Specification MIL-F-859E including Amendment 2 (NATO Symbol F-77), and Bunker C fuel oil. Residual fuel oil is used for the production of electric power, space heating, vessel bunkering, and various industrial purposes. Includes imported crude oil to be burned as a fuel.

Road Oil. Any heavy petroleum oil, including residual asphaltic oil used as a dust palliative and surface treatment on roads and highways. It is generally produced in six grades from 0, the most liquid, to 5, the most viscous.

Special Naphthas. All finished products within the gasoline range that are used as paint thinners, cleaners, or solvents. These products are refined to a specified flash point and have a boiling range of 90 degrees to 220 degrees F. *Special naphthas* includes all commercial hexane and cleaning solvents conforming to ASTM Specifications D1836 and D484, respectively. Naphthas to be blended or marketed as motor gasoline or aviation gasoline or that are to be used as petrochemical and synthetic natural gas (SNG) feedstocks are excluded.

Steam (Purchased). Steam, purchased for use by a refinery, that was not generated from within the refinery complex.

Still Gas (Refinery Gas). Any form or mixture of gas produced in refineries by distillation cracking, reforming, and other processes. The principal constituents are methane, ethane, ethylene, butane, butylene, propane, propylene, etc. Still gas is reported for petrochemical feedstock use and/or refinery fuel use.

Petrochemical Feedstock Use. Includes all refinery streams which are used by chemical or rubber manufacturing operations for further processing, less the amount of such streams returned to the source refinery. Finished petrochemical products are not included. For example, polyethylene, butadiene, etc., are considered petrochemical products; therefore, only their feed-stock equivalents are included.

Fuel Use. All other still gas.

Strategic Petroleum Reserve (SPR). Stocks (currently, only crude oil) maintained by the Federal Government for use during periods of major supply interruption.

Thermal Cracking. A refining process in which heat and pressure are used to break down, rearrange, or combine hydrocarbon molecules. Thermal cracking is used to increase the yield of gasoline obtainable from crude oil.

Unfinished Oils. Includes all oils requiring further processing, except those requiring only mechanical blending.

Unfractionated Streams. Mixtures of unsegregated natural gas liquid components excluding those included in plant condensate. This product is extracted from natural gas.

Vacuum Distillation. Distillation under reduced pressure (less the atmospheric) which lowers the boiling temperature of the liquid being distilled. This technique, with its relatively low temperatures, prevents cracking or decomposition of the charge stock.

Visbreaking. A thermal cracking process in which heavy vacuum-still bottoms produced on the primary

distillation unit are cracked to increase production of distillate products.

Wax. A solid or semi-solid material derived from petroleum distillates or residues by such treatments as chilling, precipitating with a solvent, or de-oiling. It is light-colored, more-or-less translucent crystalline mass, slightly greasy to the touch, consisting of a mixture of solid hydrocarbons in which the paraffin series predominates. Includes all marketable wax whether crude scale or fully refined. The three grades included are microcrystalline, crystalline-fully refined, and crystalline-other. The conversion factor is 280 pounds per 42-gallon barrel.

Microcrystalline Wax. Wax extracted from certain petroleum residues having a finer and less apparent crystalline structure than paraffin wax and having the following physical characteristics:

Penetration at 77 degrees F. (D-1321)-60 maximum. Viscosity at 210 degrees F. in Saybolt Universal Seconds (SUS) (D-88)-60 SUS (10.22 centistokes) minimum to 150 SUS (31.8 centistokes) maximum. Oil content (D-721)-5 percent minimum.

Crystalline-Fully Refined Wax. A light-colored paraffin wax having the following characteristics:

Viscosity at 210 degrees F. (D-88)-59.9 SUS (10.18 centistokes) maximum. Oil Content (D-721)-0.5 percent maximum. Other + 20 color, Saybolt minimum.

Crystalline-Other Wax. A paraffin wax having the following characteristics:

Viscosity at 210 degrees F. (D-88)-59.9 SUS (10.18 centistokes) maximum. Oil Content (D-721)-0.51 percent minimum to 15 percent maximum.

Western Hemisphere. That half of the earth that includes North and South America and the surrounding waters.

Bureau of Mines Petroleum Refining Districts and PAD Districts

The following are the Bureau of Mines petroleum refining districts which make up the PAD districts:

PAD District I

East Coast: District of Columbia and the States of Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New Jersey, Delaware, Maryland, Virginia, North Carolina, South Carolina, Georgia, Florida, and the following counties of the State of New York: Cayuga, Tompkins, Chemung and all counties east and north thereof. Also the following counties in the State of Pennsylvania: Bradford, Sullivan, Columbia, Montour, Northumberland, Dauphin, York, and all counties east thereof.

Appalachian #1: The State of West Virginia and those parts of the States of Pennsylvania and New York not included in the East Coast District.

PAD District II

Appalachian #2: The following counties of the State of Ohio: Erie, Huron, Crawford, Marion, Delaware, Franklin, Pickaway, Ross, Pike, Scioto, and all counties east thereof.

Indiana—Illinois—Kentucky: The States of Indiana, Illinois, Kentucky, Tennessee, Michigan, and that part of the State of Ohio not included in the Appalachian District.

Minnesota—Wisconsin—North and South Dakota: The States of Minnesota, Wisconsin, North Dakota, and South Dakota.

Oklahoma—Kansas—Missouri: The States of Oklahoma, Kansas, Missouri, Nebraska, and Iowa.

PAD District III

Texas Inland: The State of Texas except the Texas Gulf Coast District.

Texas Gulf Coast: The following counties of the State of Texas: Newton, Orange, Jefferson, Jasper, Tyler, Hardin, Liberty, Chambers, Polk, San Jacinto, Montgomery, Harris, Galveston, Waller, Fort Bend, Brazoria, Wharton, Matagorda, Jackson, Victoria, Calhoun, Refugio, Aransas, San Patricio, Nueces, Kleberg, Kenedy, Willacy, and Cameron.

Louisiana Gulf Coast: The following Parishes of the State of Louisiana: Vernon, Rapides, Avoyelles, Pointe Coupee, West Feliciana, East Feliciana, Saint Helena, Tangipahoa, Washington, and all Parishes south thereof. Also the following counties of the State of Mississippi: Pearl River, Stone, George, Hancock, Harrison, and Jackson. Also the following counties of the State of Alabama: Mobile and Baldwin.

North Louisiana—Arkansas: The State of Arkansas and those parts of the States of Louisiana, Mississippi, and Alabama not included in the Louisiana Gulf Coast District.

New Mexico: The State of New Mexico.

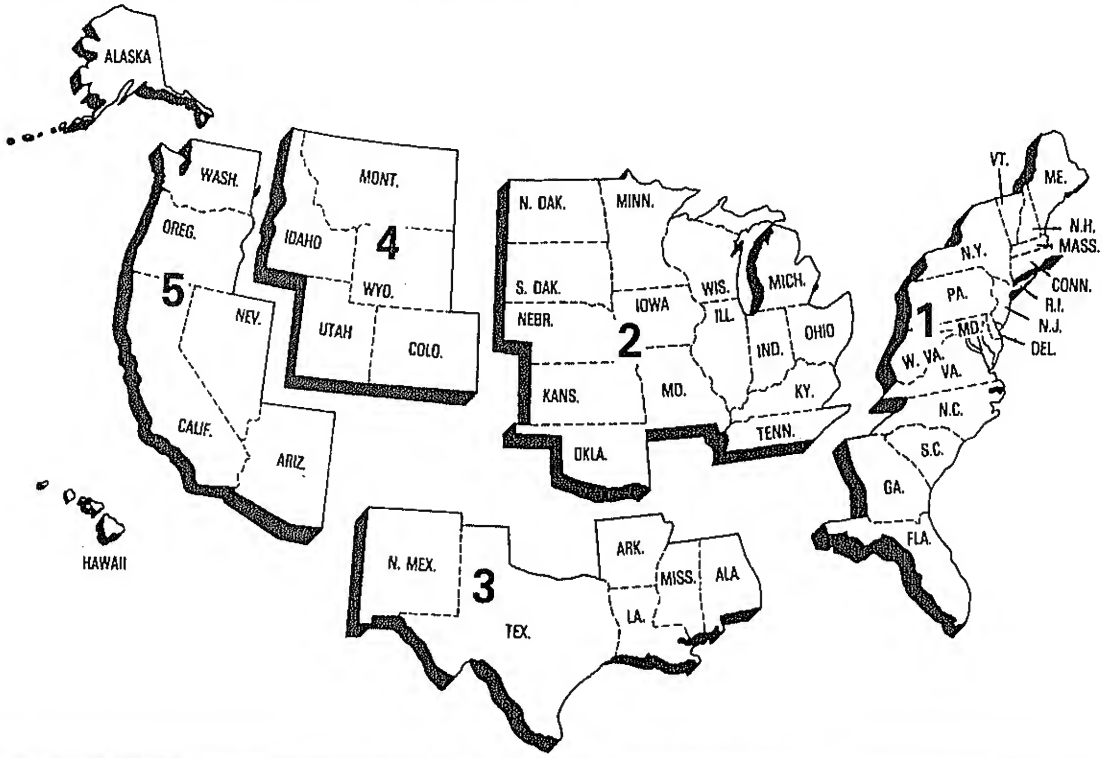
PAD District IV

Rocky Mountain: The States of Montana, Idaho, Wyoming, Utah, and Colorado.

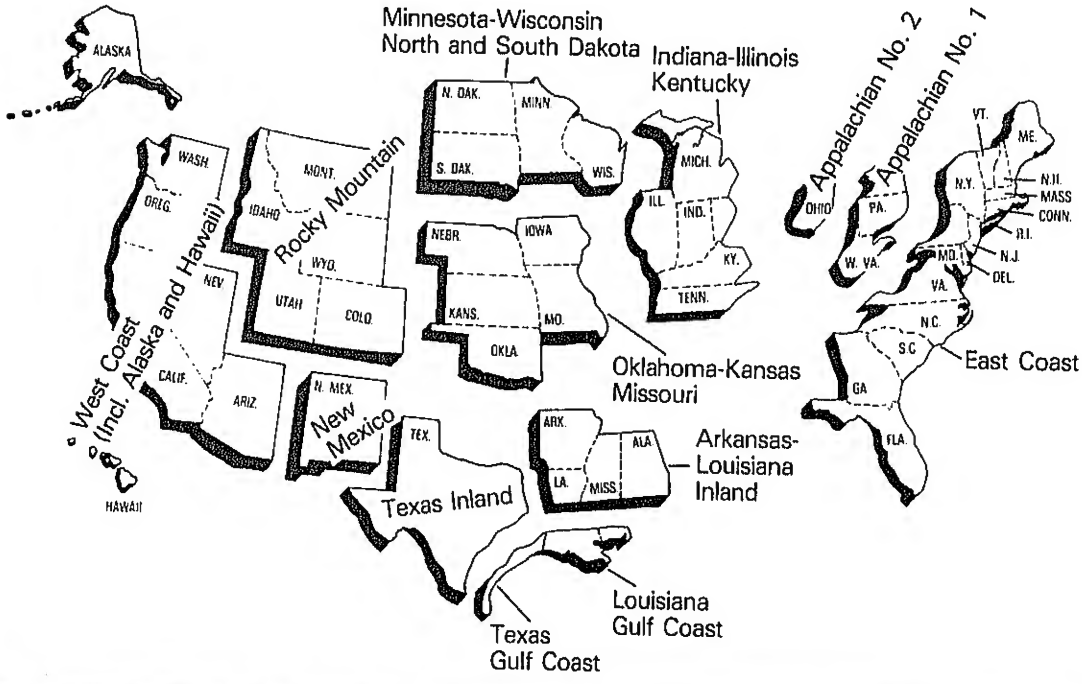
PAD District V

West Coast: The States of Washington, Oregon, California, Nevada, Arizona, Alaska, and Hawaii.

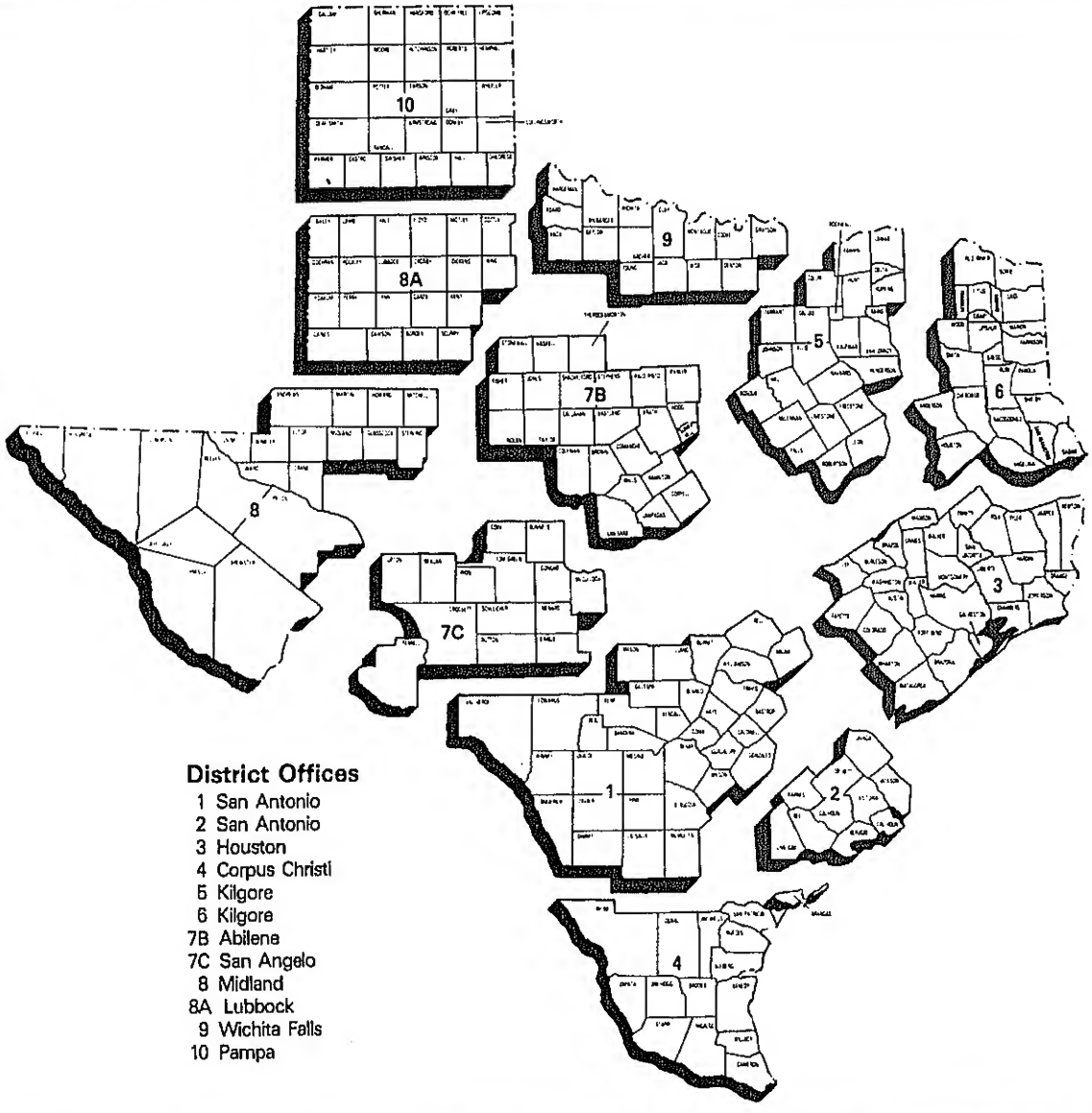
Petroleum Administration for Defense (PAD) Districts



Bureau of Mines Refining Districts



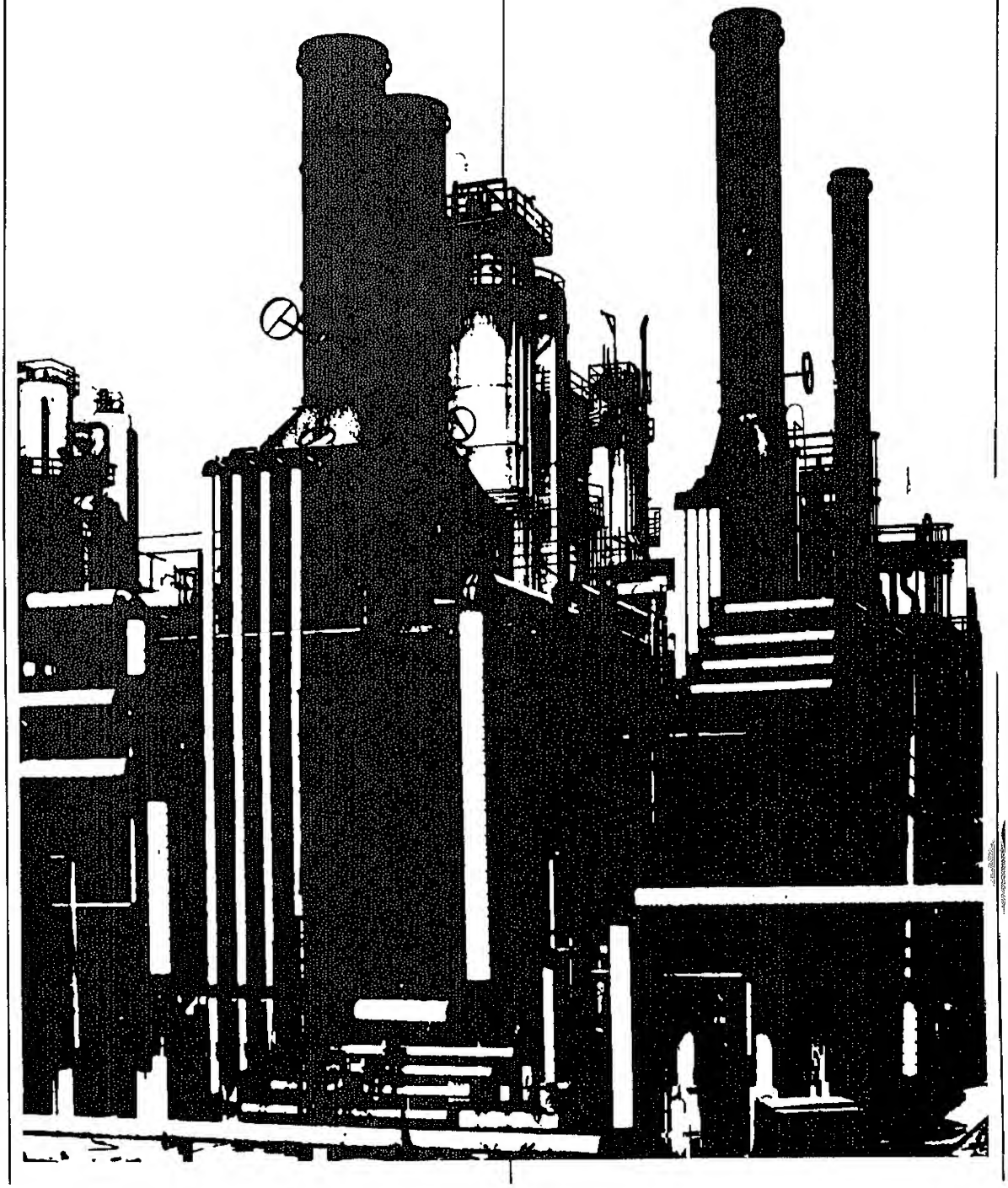
District Map Oil and Gas Division Railroad Commission of Texas



District Offices

1 San Antonio
2 San Antonio
3 Houston
4 Corpus Christi
5 Kilgore
6 Kilgore
7B Abilene
7C San Angelo
8 Midland
8A Lubbock
9 Wichita Falls
10 Pampa

Explanatory Notes



te 1: Data Collection Methodology

Background

nning in January 1983, the Energy Information Adstration (EIA) unified its petroleum supply data col- on activities into the Petroleum Supply Reporting em (PSRS). The PSRS represents a family of data ction survey forms, data processing systems and ication systems that have been consolidated to ve comparability and consistency throughout. primary focus of the consolidation has been to re- the weekly and monthly survey reporting forms to re consistency in form layout, preparation instruc-s, and definitions. As a result, a new set of survey s were implemented in January 1983. The follow- are the new form numbers and their corresponding ecessor forms:

ew Form Number	Name	Old Form Number
A-800	Weekly Refinery Report	EIA-161
A-801	Weekly Bulk Terminal Report	EIA-162
A-802	Weekly Product Pipeline Report	EIA-163
A-803	Weekly Crude Oil Stocks Report	EIA-164
A-804	Weekly Imports Report	EIA-165
A-805	Weekly Shipments from Puerto Rico to the United States Report	—
A-810	Monthly Refinery Report	EIA-87
A-811	Monthly Bulk Terminal Report	EIA-88
A-812	Monthly Product Pipeline Report	EIA-89
A-813	Monthly Crude Oil Report	EIA-90
RA-60	Monthly Imports Report	ERA-60
A-815	Monthly Shipments from Puerto Rico to the United States Report	FEA-P133-M-0
A-816	Monthly Natural Gas Liquids Report	EIA-64
A-817	Monthly Tanker and Barge Movement Report	EIA-170

ns EIA-800 through 805 comprise the Weekly Petron Supply Reporting System (WPSRS). This system esigned to collect basic refinery operations and uct stock data for major products on a weekly ba- Data from the WPSRS are published in the *Weekly oleum Status Report (WPSR)* and are also used to ulate the preliminary statistics in the "Summary istics" section of the *Petroleum Supply Monthly* (*PSM*). A description of the WPSRS survey forms follows in Note 1.1.

Forms EIA-810-813, 815-817 and ERA-60 comprise the Monthly Petroleum Supply Reporting System (MPSRS). These surveys collect detailed refinery operations data, refinery, bulk terminal and pipeline stocks data, crude oil and petroleum product imports data and movements of petroleum products and crude oil between PAD Districts data. These surveys are the primary source of data for the "Summary Statistics" and "Detailed Statistics" sections of the *PSM*. A description of MPSRS survey forms follows in Note 1.2.

Data are also obtained in magnetic tape form from the Bureau of the Census on a monthly basis. These tapes contain aggregated import and export statistics that are used in the preparation of the *PSM*. A description of the Census data follows in Note 1.3.

Note 1.1: Weekly Petroleum Supply Reporting System (WPSRS)

Background

The EIA first began publishing weekly petroleum supply statistics in April 1979 in response to the Iranian oil crisis. Initially, the published data were taken from the American Petroleum Institute (API) *Weekly Statistical Bulletin*. However, in January 1980 the EIA began to publish weekly statistics from its own surveys, with the exception of imports statistics which the EIA did not begin collecting until June 1980.

The weekly surveys collect data comparable to those collected on a monthly basis. Selected petroleum companies report weekly data to the EIA on crude oil and petroleum product stocks, refinery inputs and production, and crude oil and petroleum product imports. On Forms EIA-800 through EIA-803, companies report data on a custody basis. On the Form EIA-804, the importer of record reports each shipment entering the United States. On Form EIA-805, a company shipping unfinished oils and finished petroleum products into the United States from Puerto Rico reports each shipment. Current weekly data and the most recent monthly data are used to estimate the totals that are published in the *Weekly Petroleum Status Report*.

Sample Frame

The sample of companies that report weekly is selected from the universe of companies that report on the comparable monthly surveys. Sampled companies report data only for facilities in the 50 States and District of Columbia.

The sample for each survey is taken from the following universe:

EIA-800: Based on the EIA-810 universe, which includes all petroleum refineries in the United States and

its territories, industrial facilities that have crude oil distillation capacity and produce some refined petroleum products, and plants that produce finished motor gasoline through mechanical blending. The selected sample size is 215.

EIA-801: Based on the EIA-811 universe, which includes all bulk terminal facilities in the United States and its territories that have either a total bulk storage capacity of 50,000 barrels or more, or that receive petroleum products by tanker, barge, or pipeline. The selected sample size is 93.

EIA-802: Based on the EIA-812 universe, which includes all petroleum product pipeline companies in the United States and its territories that transport refined petroleum products, including interstate, intrastate and intracompany pipeline movements. Pipeline companies that transport only natural gas liquids are not included in the EIA-802 frame. Only those pipeline companies that transport products covered in the weekly survey are included. The selected sample size is 65.

EIA-803: Based on the EIA-813 universe, which consists of all companies which carry or store crude oil of 1,000 barrels or more in the 50 States, and the District of Columbia. Included are gathering and trunk pipeline companies (including interstate, intrastate, and intracompany pipelines), crude oil producers, terminal operators, storers of crude oil, and companies transporting Alaskan crude oil by water.

EIA-804: Based on the ERA-60 universe, which includes all importers of record of crude oil and petroleum products into the United States and Puerto Rico. The selected sample size is 65.

EIA-805: Based on the EIA-815 universe, which includes all shippers of unfinished oils and petroleum products into the United States from Puerto Rico. Four companies report.

Sampling Method

The cut-off method is the sampling procedure used for all weekly surveys except the EIA-802, which uses the monthly universe in its entirety. In the cut-off method, companies are ranked from largest to smallest on the basis of the quantities reported during some previous 12-month period. Companies are chosen for the sampling, beginning with the largest and adding companies until the total sample covers 90 percent of the total for the previous time period for each product published in the *Weekly Petroleum Status Report.*

Collection Methods

Data are collected by mail, mailgram, telephone, Telex, and Telefax on a weekly basis. The report period closes each Friday at 7 a.m. All canvassed firms and terminal operations companies must file by 5 p.m. on the following Monday.

Estimation and Imputation

After company reports have been checked and entered into the weekly data base, weekly totals for given products are estimated by using the following formula.

The total reported by all companies for the most recent month (M_t) is divided by the amount reported by the sample of companies for the most recent month (M_s). The result is multiplied by the amount reported by the sample of companies for the current week (W_s). The answer, W_t, is an estimate of the amount that would have been reported by all companies for the current week if all companies reported each week.

$$W_t = \frac{M_t}{M_s}(W_s)$$

This procedure is used to estimate total weekly inputs to refineries and production.

To estimate stocks of finished products, the preceding procedure is followed separately for refineries, bulk terminals, and pipelines. Total estimates are formed by summing over establishment types.

Weekly imports data are highly variable on a company-by-company basis or a week-by-week basis. Therefore, an exponentially smoothed ratio has been developed. The estimate of weekly imports is the sum of the smoothed ratio multiplied by the weekly values and estimates for shipments from Puerto Rico. Imports of other oils includes an adjustment from Census data for unlicensed products because of coverage differences between the monthly imports data and Census data.

Explicit imputation is done for companies which do not respond in a given week. The imputed values are exponentially smoothed means of recent reports from the specific company.

Response Rates

The response rate for the published estimates is usually between 95 and 98 percent.

Note 1.2: Monthly Petroleum Supply Reporting System (MPSRS)

Background

The MPSRS was implemented in January 1983 as the result of an extensive effort to integrate the collection and processing of petroleum supply data that have been collected on other survey forms for many years. The collection of monthly petroleum supply statistics began as early as 1918 when the Bureau of Mines (BOM) began collecting data on refinery operations and crude oil stocks and movements. The collection systems

were further expanded to include natural gas plant liquids production and storage in 1925, imports of crude oil and petroleum products and storage and movements of petroleum products in 1959, and tanker and barge movements of crude oil and petroleum products in 1964. Since their inception, each survey has undergone numerous changes, but the MPSRS is the first effort to make them all consistent and comparable.

Respondent Frame

EIA-810: All petroleum refineries and plants that produce finished motor gasoline through the mechanical blending of liquids which are operated or controlled in the 50 States, the District of Columbia, Puerto Rico, the Virgin Islands, the Hawaiian Foreign Trade Zone, and Guam. Approximately 313 respondents report on the EIA-810.

EIA-811: All bulk terminal facilities in the 50 States and the District of Columbia, Puerto Rico, and the Virgin Islands that (a) have a total bulk storage capacity of 50,000 barrels or more and/or (b) receive petroleum products by tanker, barge, or pipeline, regardless of ownership of the material. Approximately 328 respondents report on the EIA-811.

EIA-812: All products pipeline companies that carry petroleum products (including interstate, intrastate and intracompany pipelines) in the 50 States and the District of Columbia. Approximately 94 respondents report on the EIA-812.

EIA-813: All companies which carry or store crude oil of 1,000 barrels or more in the 50 States, and the District of Columbia. Included are gathering and trunk pipeline companies (including interstate, intrastate, and intracompany pipelines), crude oil producers, terminal operators, storers of crude oil, and companies transporting Alaskan crude oil by water.

EIA-815: All licensed importers and importers of record shipping petroleum products from Puerto Rico into the 50 States and the District of Columbia.

Import data from the ERA-60 and EIA-815 are integrated into the import statistics reported in the *PSM*.

EIA-816: All operators of facilities designed to extract liquid hydrocarbons from natural gas stream (natural gas processing plants) or to separate a hydrocarbon stream into its component products, i.e., propane, butane, natural gasoline, etc. (fractionators). Approximately 990 respondents report on the EIA-816.

EIA-817: All known companies and plants that have custody of crude oil and petroleum products transported by tanker and barge between PAD Districts or between PAD Districts and the Panama Canal. There are about 50 respondents.

ERA-60: All licensed importers and importers of record importing crude oil and petroleum products into the United States and Puerto Rico. The respondent universe consisted of approximately 1,100 firms as of July 31, 1982. However, only a selected 250 importers must report each month regardless of import activity. All others must report only for a month in which they actually had imports. The respondent universe for this survey is updated whenever an import license is granted by the Office of Oil Imports of the ERA.

EIA utilizes a number of sources and methods to maintain the survey respondent lists. On a regular basis, survey managers review industry publications such as the *Oil and Gas Journal* and *LP Gas Almanac* for information on facilities or companies going into operation or closing down. These are augmented by articles in newspapers, letters from respondents indicating changes in status and information received from survey systems operated by other offices.

Periodically an extensive survey study is conducted to completely refresh the frames. This involves consolidating information from every known source including State agencies, federal agencies (e.g., EPA, Corps of Engineers, Census Bureau, etc.), and private industry directories. The effort also includes the evaluation of the impact of potential frame changes on the historical time series of data published from these respondents. The results of this frame study are usually implemented in January to provide a full year under the same frame.

Collection Methods

The data for all of the MPSRS surveys are collected monthly. Completed forms are required to be postmarked by the 20th day following the end of the report month, with the exception of the EIA-815 and ERA-60 which are due 15 work days following the end of the report month. Telephone follow-up calls are made to nonrespondents prior to the publication deadline, for their data. An automated mailing list is maintained and is used to monitor receipt of the forms.

Imputing Missing Data

Imputation is performed only for nonresponding companies that submitted reports the previous month. For such companies, previous monthly values are used for current values. The previous month's ending stocks value is used for both the current month's beginning stocks and the current month's ending stocks. In the event that the previous month's data were estimated, the respondent is contacted and requested to submit estimates, if necessary, to be followed by submission of actual data. Data for nonrespondents on the EIA-815 and 817, and ERA-60 are not imputed.

Response Rates

As of the filing deadline, the response rates of the EIA-810 through EIA-813 respondents is over 90 per-

cent. The response rate for the EIA-816 is over 85 percent and for the EIA-817 it is 98 percent. All companies that have not responded are contacted by telephone. Although data are taken by telephone to expedite processing, a certified submission is still required. Names of companies that fail to file for 2 consecutive months are forwarded for further noncompliance action.

In July 1982, the ERA-60 survey had a response rate of 98 percent by the filing deadline. The universe was 1,100 firms at that time. (Because this is a dynamic survey, the universe is constantly changing.) Standard follow-up of nonrespondents is made to insure that all reports are received, since data are not imputed for nonrespondents. In addition, response is cross-checked with response on the Petroleum Licensing Decrementation System (PLDS), a listing of each month's importers. The response rate is generally 98 to 99 percent by the time the data are first published.

Note 1.3: Census Import (IM-145) and Export (EM-522 and EM-594) Data

Background

Each month the EIA purchases magnetic tapes of aggregated import and export statistics from the Bureau of the Census. These data provide the only source of export statistics and are used to augment the import data collected by the EIA. Export statistics and import data from the Census tapes on liquefied petroleum gases, bonded ships bunkers and military offshore use are published in the *PSM*.

Import Statistics (IM-145)

Coverage

The import statistics reflect both government and nongovernment imports of merchandise from foreign countries into the U.S. Customs territory (the 50 States, the District of Columbia, and Puerto Rico), without regard to whether or not a commercial transaction is involved. In general, the statistics record the physical movement of merchandise into the United States from foreign countries, with the exception of the following types of transactions that are excluded from the statistics:

1. Merchandise in-transit through the United States, when documented with Customs as an in-transit movement.

2. Shipments from anywhere to U.S. possessions and shipments from U.S. possessions to the United States. (U.S. possessions include Puerto Rico, the Virgin Islands, Guam, and American Samoa.)

3. U.S. merchandise that was held in foreign countries by the U.S. Armed Forces and is returned to the United States for the use of the Armed Forces.

Source of Import Information

The official U.S. import statistics are compiled by the Bureau of the Census from copies of the import entry and warehouse withdrawal forms that importers are required by law to file with Customs officials (Customs Forms 7501, 7505, and 7506).

Imported petroleum is reported as *Imports for Consumption*. Imports for consumption are a combination of entries for immediate consumption and withdrawals from warehouses for consumption. With certain exceptions as indicated above, these data generally reflect the total of commodities entered into U.S. consumption channels.

Country and Area of Origin

The country reported in the statistics as the country of origin is defined as the country where the merchandise was grown, mined, or manufactured. In instances where the country of origin cannot be determined, the transactions are credited to the country of shipment.

Export Statistics (EM-522 and EM-594)

Coverage

The export statistics reflect both government and nongovernment exports of domestic and foreign merchandise from the U.S. Customs territory (the 50 States, the District of Columbia, and Puerto Rico) to foreign countries, without regard to whether or not the exportation involves a commercial transaction. In general, the statistics record the physical movement of merchandise out of the United States to foreign countries, with the exception of the following types of transactions:

1. All shipments from U.S. possessions, regardless of whether the shipments are sent to the United States, to other U.S. possessions, or to foreign countries.

2. Merchandise shipped in transit through the United States from one foreign country to another, when documented as such with U.S. Customs.

3. Bunker fuels and other supplies and equipment for use on departing vessels, planes, or other carriers engaged in foreign trade.

Source of Export Information

The official U.S. export statistics are compiled by the Bureau of the Census primarily from copies of Shipper's Export Declarations. Exporters are required to file Shipper's Export Declarations with Custom's officials. The only exceptions are those exporters who have been authorized to submit data directly to the Bureau of Census on magnetic tape, punched cards, or monthly Shipper's Summary Export Declarations.

from the State conservation agencies and the U.S. Geological Survey. The ten States that do not report monthly values are Indiana, Kentucky, Missouri, Arkansas, Utah, New York, Ohio, Pennsylvania, West Virginia, and Wyoming. Monthly values are estimated for these States using the individual linear trends of their historical annual crude oil production values.

There is a time lag of approximately 4 months between the end of the reporting month and the time when the monthly COPS information becomes available. Table 11 of this publication provides information on crude oil production for the most recent month for which COPS values are available. In order to present more timely crude oil production values, the EIA's Dallas Field Office prepares a series of State level estimates which are based on historical production patterns and are summed to obtain the monthly crude oil production values shown in the summary statistics of this publication.

The individual State level estimates are either exponential curve fitted projections based on recent data or are constant level projections based on the average production rate during a recent time period. In some cases, adjustments are made to these estimates based on additional information on expected changes in production rates supplied by a State agency, a trade association, or an individual field operator.

Note 4: Disposition

The components of petroleum disposition are crude oil losses, refinery inputs, exports, and products supplied for domestic consumption.

Crude Oil Losses is the sum of crude oil losses at refineries. Crude oil losses at refineries are reported on Form EIA-810, *Refinery Report.*

Refinery Inputs of crude oil, natural gas plant liquids, and other liquids are reported monthly on survey Form EIA-810, *Monthly Refinery Report.* Published inputs of unfinished oils and of motor and aviation gasoline blending components equal refinery input minus refinery output. Refinery inputs of finished petroleum products are reported on a net basis under refinery production.

finery input, minus exports. This formula ensures that total disposition equals total supply.

Products supplied indicates those quantities of petroleum products supplied for domestic consumption. Occasionally, the result for a product is negative because total disposition of that product exceeds total supply. Negative product supplied may occur for a number of reasons: (1) product reclassification has not been reported, (2) data were misreported or reported late, (3) in the case of calculations on a PAD District basis, the figure for net receipts was inaccurate because the coverage of interdistrict movements was incomplete.

Product supplied for crude oil is the sum of crude oil burned on leases and by pipelines as fuel oil. These data are reported on EIA-813, *Monthly Crude Oil Report.* Prior to January 1983, crude oil burned on leases and by pipelines as fuel oil were reported as either distillate or residual fuel oil and included in product supplied for these products.

Note 5: Stocks

Primary stocks of crude oil are the sum of ending stocks reported monthly on Form EIA-810, *Monthly Refinery Report*, and on Form EIA-813, *Monthly Crude Oil Report.* Crude oil held in the Strategic Petroleum Reserve is included unless otherwise noted. Alaskan crude oil in transit is also included. Stocks of crude oil are also reported weekly on Form EIA-800, *Weekly Refinery Report*, and on Form EIA-803, *Weekly Crude Oil Stocks Report.* Primary stocks of petroleum products are summed from data reported on Form EIA-816, *Monthly Natural Gas Liquids Report*, Form EIA-811, *Monthly Bulk Terminal Report*, and on Form EIA-812, *Monthly Product Pipeline Report.* Primary stocks of petroleum products do not include either secondary stocks held by dealers and jobbers or stocks held by consumers. Petroleum product stocks are also reported weekly on Form EIA-800, *Weekly Refinery Report*, Form EIA-801, *Weekly Bulk Terminal Report*, and Form EIA-802, *Weekly Crude Oil Stocks Report.* For survey descriptions and other details, see Explanatory Notes 1.1 - 1.3.

Note 6: Average Stock Levels

The graphs displaying monthly stock levels of crude oil, motor gasoline, distillate fuel oil, residual fuel oil, liquefied petroleum gases, and other products provide the user with recent data as well as a summary of data from January through December or from July through June for the most recent 3-year period. This summary takes the form of an *average range* that includes seasonal variation determined from a longer time period. The

average range represents the historical pattern; it is not a forecast.

These curves are updated semiannually (on April 1 and October 1), by basing the *average ranges* on a more recent time period. Each 3-year data series is adjusted by dropping the first 6 months and including the most recent 6 months.

For each data series, the monthly seasonal factors are estimated by means of a seasonal adjustment technique developed at the Bureau of the Census (Census X-11). The seasonal factors are assumed to be stable (i.e., unchanging from year to year) and additive. The series is deseasonalized by subtracting the seasonal factor for the appropriate month from the reported stock levels. The intent of deseasonalization is to remove only seasonal variation from the data. Thus, a deseasonalized series would contain the same trends and irregularities as the original data. For crude oil stocks, the derived seasonal factors are very small relative to crude oil stock levels. Therefore, the seasonal factors for distillate fuel oil, residual fuel oil, liquefied petroleum gases and other products are derived using monthly data from 1974-1980. For motor gasoline, the seasonal factors are based on monthly data from 1975, 1976, 1978, 1979 and 1980. In 1977, there was virtually no seasonal behavior in motor gasoline stocks. Monthly stock levels stayed at the same high level for the entire year. In addition, the seasonal patterns in 1973, 1974 and 1977 were not representative of the recent past, and these years were not used in the determination of seasonal patterns for motor gasoline stocks. Because of these differences in the year-to-year seasonal fluctuation of motor gasoline, the evidence for the illustrated seasonal patterns for crude oil, distillate fuel oil, residual fuel oil, liquefied petroleum gases and other products is stronger than is the evidence for the illustrated seasonal patterns for motor gasoline.

In some cases, these seasonal patterns do not show a smooth transition from month to month. For example, the June factor for residual fuel oil is slightly less than the May and July values, making a bump in the curve. As there is little difference in the magnitude of these seasonal factors, it is possible that this variation is due to the small number of observations (7 years) and the data variability.

After seasonal factors are derived, the most recent 3-year period (from January through December or from July through June) is deseasonalized. The average of the deseasonalized 36-month series determines the midpoint of the deseasonalized average band. The standard error of the deseasonalized 36 months is calculated adjusting for extreme data points. The width of the *average range* is twice this standard error.

The upper curve of the *average range* is defined as the average plus the seasonal factors plus the standard error. The lower curve is defined as the average plus the seasonal factors minus the standard error.

Note 7: Movements

Movements of crude oil between PAD Districts are reported on Form EIA-817, *Monthly Tanker and Barge Movement Report*, and on Form EIA-813, *Monthly Crude Oil Report*. Petroleum product movements are reported on Forms EIA-817 and EIA-812, *Monthly Product Pipeline Report*. Net receipts is the difference between total movements into and total movements out of each PAD District by pipeline, tanker, and barge. For survey descriptions and other detail, see Explanatory Note 1.2.

Note 8: Preliminary Monthly Statistics

Weekly data (Forms EIA-800, 801, 802, 803, and 804) are used to estimate the most recent monthly values for the *Summary Statistics* section. Since some of the weekly reporting periods overlap two adjacent months, it is necessary to use weighting factors in the calculation of the monthly values.

To estimate crude oil and petroleum product imports, crude oil input to refineries and production of petroleum products for a specific month, the weekly estimates are weighted by the number of days of that month included in each week, then summed.

End-of-month stock levels of crude oil and the major products (motor gasoline, distillate fuel oil, and residual fuel oil) are calculated in a similar manner, but use only the two weekly reporting periods that cover the end-of-week stocks before and after the end of the month. The end-of-month stock level is calculated by first calculating the stock change between the two weeks. The daily stock change between the two end-of-week stock levels is then calculated. This number is multiplied by the weighting factor of the earlier of the two weeks (the week that covers the last day of the month of interest). This change is added to the earlier of the two end-of-week stock levels to estimate the end-of-month stock level.

Preliminary monthly estimates of domestic crude oil production are calculated as described in Explanatory Note 3.

Note 9: Notes on Tables

Note 9.1 Crude Oil and Petroleum Products Overview statistics on the referenced line appear in Table 4 of the Detailed Statistics, except where noted.

- Crude Oil and Petroleum Products Stock Withdrawal (+) or Addition (−), Petroleum Products Supplied, Total Imports, Crude Oil Imports, Total Exports, and Crude Oil Exports appear as labeled in Table 4. Total Production and Crude Oil Production appear under Field Production in Table 4.

• Natural Gas Plant Production is the sum of Natural Gas Liquids and Finished Petroleum Products Field Production in Table 4.

• Petroleum Products Imports is the sum of Natural Gas Liquids and LRGs, Other Liquids, and Finished Petroleum Products Imports in Table 4.

• Total Crude Oil and Petroleum Products Ending Stocks appear in thousand barrels in Table 2.

Note 9.2 Crude Oil Supply and Disposition statistics on the referenced line appear in Table 1 of the Detailed Statistics, except where noted.

• Total Domestic Field Production, Alaskan Field Production, SPR Imports, Other Imports (synonymous with Imports Gross Excl. SPR), SPR and Other Primary Stocks Withdrawal (+) or Addition (−), Unaccounted For Crude Oil, Refinery Inputs, and Exports appear as labeled in Table 1.

• Crude losses and Product Supplied appear as labeled in Table 4.

• SPR Ending Stocks and Other Primary Ending Stocks (synonymous with stocks excluding SPR) appear in thousand barrels in Table 1.

• Total Crude oil Ending Stocks appear in thousand barrels in Table 2.

• Total Imports appear in Table 4.

Note 9.3 Finished Motor Gasoline Supply and Disposition statistics on the referenced line appear in Table 4 of the Detailed Statistics, except where noted.

• Total Production is the sum of Field Production and Refinery Production in Table 4.

• Imports, Stock Withdrawal (+) or Addition (−), Exports, and Product Supplied appear as labeled in Table 4.

• Unleaded Percent of Total Product Supplied represents the ratio of finished unleaded motor gasoline product supplied to total finished motor gasoline product supplied, multiplied by 100 and rounded to the nearest tenth.

• Ending Stocks appear in thousand barrels in Table 2.

Note 9.4 Distillate and Residual Fuel Oil Supply and Disposition statistics on the referenced lines appear in Table 4 of the Detailed Statistics, except where noted.

• Total Production is the sum of Field Production and Refinery Production in Table 4.

• Imports, Stock Withdrawal (+) or Addition (−), Exports, and Product Supplied appear as labeled in Table 4.

• Ending Stocks appear in thousand barrels in Table 2.

Note 9.5 Liquefied Petroleum Gases Supply and Disposition statistics represent the aggregation of statistics on ethane, propane, butane, butane-propane mixtures, ethane-propane mixtures, and isobutane. The statistics on the referenced line appear in Table 4 of the Detailed Statistics, except where noted.

• Total Production is the sum of Field Production and Refinery Production in Table 4.

• Imports, Stocks Withdrawal (+) or Addition (−), Refinery Inputs, Exports, and Product Supplied appear as labeled in Table 4.

• Ending stocks appear in thousand barrels in Table 2.

Note 9.6 Other Petroleum Products Supply and Disposition statistics represent the aggregation of statistics on natural gasoline, isopentane, unfractionated stream, plant condensate, other liquids, and all finished petroleum products except finished motor gasoline, distillate fuel oil, and residual fuel oil. The statistics on the referenced line are aggregated from Table 4 of the Detailed Statistics, except where noted.

• Total Production is the aggregated sum of Field Production and Refinery Production in Table 4.

• Imports, Stock Withdrawal (+) or Addition (−), Refinery Inputs, Exports, and Product Supplied are aggregated from Table 4.

• Ending stocks are aggregated from ending stocks in thousand barrels.

Note 9.7 Table 1. U.S. Petroleum Balance

• Lines (1) through (3): Crude oil (including lease condensate) production for *Alaska*, *Lower 48 States*, and *Total U.S.* are calculated by calling the conservation agency in Alaska for Alaskan crude oil production during the month, estimating crude oil production in the United States (see Explanatory Note 3), and taking the difference to equal production in the Lower 48 States.

• Line (5): *SPR Imports* are reported on Survey Form ERA-60.

• Line (12): *Total Other Sources* equals crude oil stock withdrawal (+) or addition (−) plus unaccounted for crude oil minus crude losses in Table 2.

• Line (14): Natural gas plant liquids (NGPL) *Production* equals field production of natural gas liquids (NGL) plus field production of finished petroleum products in Table 2.

• Line (15): NGPL *Imports* equals the sum of the im-

ports of natural gasoline and isopentane, unfractionated stream, and plant condensate imports in Table 2.

• Line (16): NGPL *Stock Withdrawal (+) or Addition (−)* is equal to the sum of stock withdrawal (+) or addition (−) of natural gasoline and isopentane, unfractionated stream, and plant condensate in Table 2.

• Line (17) equals the sum of lines (14), (15), and (16).

• Line (18): Unfinished oils and gasoline blending components *Stock Withdrawal (+) or Addition (−)* equals stock withdrawal (+) or addition (−) for other hydrocarbons and alcohol, for unfinished oils, motor gasoline blending components, and aviation gasoline blending components.

• Line (20): *Other Hydrocarbons and Alcohol New Supply* equals the field production of same in Table 2.

• Line (21): *Refinery Processing Gain* is a balancing item equal to total refinery production minus total refinery input in Table 2.

• Line (23): *Total Other Liquids* equals the sum of lines (18) through (22).

• Line (24): *Total Production of Products* equals crude oil input to refineries plus field production of NGPL and finished petroleum products; plus imports of natural gasoline and isopentane, unfractionated stream, and plant condensate; plus stock withdrawal (+) or addition (−) of natural gasoline and isopentane, unfractionated stream, and plant condensate; plus stock withdrawal (+) or addition (−) of other hydrocarbons and alcohol, unfinished oils, aviation gasoline blending components, and motor gasoline blending components; plus imports of unfinished oils, aviation gasoline blending components, and motor gasoline blending components; plus field production of other hydrocarbons and alcohol; plus total refinery production; minus total refinery input; plus crude oil product supplied in Table 2.

• Line (25): *Gross Imports of Refined Products* equals imports of LPG plus imports of finished petroleum products in Table 2.

• Line (26): *Exports of Refined Products* equals exports of LPG plus exports of finished petroleum products in Table 2.

• Line (27): *Net Imports of Refined Products* equals the difference between lines (25) and (26).

• Line (28): *Total New Supply of Products* equals crude oil input to refineries plus field production of NGPL and finished petroleum products; plus imports of natural gasoline and isopentane, unfractionated stream, and plant condensate; plus stock withdrawal (+) or addition (−) of natural gasoline and isopentane, unfractionated stream, and plant condensate; plus stock withdrawal (+) or addition (−) of other hydrocarbons and alcohol, unfinished oils, aviation gasoline blending components, and motor gasoline blending components; plus imports of unfinished oils, aviation gasoline blending components, and motor gasoline blending components; plus field production of other hydrocarbons and alcohol; plus total refinery production; minus total refinery input; minus crude oil product supplied plus imports of LPG and finished petroleum products; minus exports of LPG and finished petroleum products in Table 2.

• Line (29): *Refined Products Stocks Withdrawal (+) or Addition (−)* equals the sum of stock withdrawal (+) or addition (−) for LPG and finished petroleum products in Table 2.

• Line (30): *Total Petroleum Products Supplied for Domestic Use* equals total products supplied in Table 2.

• Lines (31) through (35) equal the respective products supplied in Table 2.

• Line (36): *Other Products Supplied* equals the sum of natural gasoline and isopentane, unfractionated stream, plant condensate, aviation gasoline, naphtha < 400 Deg. F for petrochemical feedstock use, other oils > 400 Deg. F. for petrochemical feedstock use, special naphthas, lubricants, waxes, coke, asphalt, road oil, still gas, unfinished oils, motor gasoline blending components, aviation gasoline blending components and miscellaneous products supplied in Table 2.

• Line (37): *Total Product Supplied* is equal to total products supplied in Table 2.

• The sum of lines (38) and (39), stocks of *Crude Oil and Lease Condensate (Excluding SPR)* and stocks held by the *Strategic Petroleum Reserve*, equals ending stocks of crude oil in Table 2. SPR stocks are reported on Form EIA-813.

• Line (43): stocks of *Refined Products*, equals the sum of LPG and finished petroleum product stocks in Table 2.

Note 10: New Stock Basis

In January 1975, 1981, and 1983, numerous respondents were added to bulk terminal and pipeline surveys affecting subsequent stocks reported and stock withdrawal calculations. Using the expanded coverage (new basis), the end-of-year stocks, in million barrels, would have been:

• Crude Oil and Petroleum Products: 1974—1,121; 1980—1,420; and 1982—1,462.

• Motor Gasoline: 1974—225; 1980—263; 1982—244 (Total) and 203 (Finished).

• Distillate Fuel Oil: 1974—224; 1980—205; and 1982—186.

• Residual Fuel Oil: 1974—75; 1980—91; and 1982—68.

• Liquefied Petroleum Gases: 1974—113; 1980—128; and 1982—103.

• Other Petroleum Products: 1974—220; 1980—249; and 1982—259.

• Stock withdrawal calculations beginning in 1975, 1981, 1983 were made using new basis stock levels.

Note 11:

Stocks of Alaskan crude oil in transit were included for the first time in January 1981. The major impact of this change is on the reporting of stock withdrawal calculations. Using the expanded coverage (new basis), 1980 end-of-year stocks, in million barrels, would have been 488 (Total) and 380 (Other Primary).

Note 12: Changes in Petroleum Industry Reporting

Petroleum statistics contained in this report for all years through 1980 were developed using definitions, concepts, reporting procedures and aggregation methods that are consistent with those developed by the U.S. Bureau of Mines. Research conducted by the Energy Information Administration in 1979 and 1980 indicated that changes had occurred in the petroleum industry that were not being adequately reflected in EIA's reporting systems.

EIA reporting forms, definitions, and procedures were modified beginning in January 1981 to describe industry operations more accurately. Unfortunately, empirical information is not available to precisely measure the data shortcomings throughout 1980. However, estimates of the magnitudes of differences in the major data series are described below to form a basis for comparing 1979, 1980, and 1981 data.

Motor Gasoline

Prior to 1979, the EIA product-supplied series for motor gasoline was consistently about 2 percent lower than the Federal Highway Administration (FHWA) gasoline-sales data series, which is derived from State tax receipts. This difference increased to about 4 percent in 1979 and 5 percent in 1980. There are two primary causes for this growing difference. First, refinery operations, particularly the flows of unfinished oils and the redesignation of some finished products, were not being accurately described on the EIA survey forms. Second, a large amount of gasoline was being produced away from refineries at "downstream blending stations" to take advantage of provisions in regulations governing the amount of lead that could be added. These blending stations were not reporting gasoline production to the EIA until the data system was changed in January 1981.

Quantitative estimates of the magnitude of the difference—in EIA's gasoline product supplied data in 1979 and 1980 have been made by the EIA and the American Petroleum Institute (API). The following table provides 1979 and 1980 data as published in the *Petroleum Statement Annual*, as well as EIA and API estimates of "recast" motor gasoline product supplied. EIA recast estimates were based upon preliminary monthly information in the *Monthly Petroleum Statement*. The ranges displayed in the EIA column reflect uncertainty in the estimates. Also shown are the FHWA motor gasoline sales statistics for those years. EIA has recently published a study of the quality of these FHWA data.[1]

[1]Office of Energy Information Validation, Energy Information Administration, U.S. Department of Energy, *Error Profile of the Motor Fuel Taxation Data used to Establish and Monitor State Emergency Conservation Targets* (Washington, D.C: December, 1981).

Finished Motor Gasoline Product Supplied on Old and New Basis (Thousand Barrels per Day)

	1979				1980			
	EIA Reported	API Recast	EIA Recast	FHWA[1]	EIA Reported	API Recast	EIA Recast	FHWA[1]
Jan	6,830	7,230	7,084-7,246	6,984	6,323	6,789	6,630-6,791	6,672
Feb	7,254	7,496	7,389-7,568	7,538	6,596	6,983	6,831-7,003	6,830
Mar	7,229	7,414	7,301-7,463	7,316	6,406	6,753	6,607-6,768	6,713
Apr	7,055	7,300	7,187-7,353	7,375	6,800	7,014	6,886-7,052	6,981
May	7,213	7,429	7,313-7,475	7,428	6,729	6,954	6,823-6,984	7,044
Jun	7,191	7,483	7,350-7,516	7,441	6,657	6,966	6,824-6,991	7,049
Jul	6,902	7,241	7,105-7,266	7,299	6,743	6,973	6,960	7,132
Aug	7,330	7,546	7,426-7,588	7,619	6,648	6,841	6,828	7,090
Sep	6,881	7,122	7,016-7,262	7,232	6,510	6,692	6,962	6,685
Nov	6,791	7,068	6,956-7,122	7,142	6,234	6,507	6,516	6,951
Dec	6,730	7,106	6,966-7,127	7,064	6,632	6,948	6,936	6,993
Average	7,034	7,302	7,183-7,347	7,309	6,579	6,882	6,806-6,889	6,925

[1]FHWA gasoline statistics published in their 1979 Table MF-33G, 08-06-80, contain aviation gasoline as well as motor gasoline. Only motor gasoline data are included in published 1980 data. Consequently, the 1979 data shown above were reduced by subtracting aviation gasoline product supplied quantities as published by EIA in the 1979 *Petroleum Statement Annual*. The 1980 FHWA data published in their 1980 Table MF-33GA, August 1981, did not require this adjustment.

Distillate and Residual Fuel Oil

Distillate and residual fuel oil refinery production statistics through 1980 were adjusted to account for an imbalance between unfinished oil supply and disposition. The reported quantities of refinery inputs of unfinished oils typically exceed the available supply of unfinished oils. It has been assumed that this occurs when distillate and residual fuel oil produced by a refinery is shipped to another refinery, where it is treated as unfinished oil. This oil is then reprocessed rather than used or sold as distillate or residual fuel oil.

For many years (including 1980), the difference between unfinished oil disposition and supply was subtracted from distillate and residual fuel oil production to adjust for this discrepancy. Two-thirds of the difference was applied to distillate, and one-third to residual fuel oil.

Beginning in January 1981 this adjustment was discontinued because there was not sufficient empirical evidence to support it. The following table presents distillate and residual fuel oil refinery production in 1980 as published (adjusted) and on the same basis as 1981 statistics are now being completed (unadjusted) to permit comparison between 1980 and 1981 data series. Adjusted distillate and residual fuel oil product supplied volumes differ from the unadjusted volumes by the same amounts as the adjusted and unadjusted production volumes.

Adjusted and Unadjusted Refinery Production, and Unadjusted Product Supplied of Distillate and Residual Fuel Oils, by Month for 1979 and 1980 (Thousand Barrels Per Day)

1979

Month	Distillate Fuel Oil				Residual Fuel Oil			
	Adj. Ref. Prod.	Unadj. Ref. Prod.	Diff.	Unadj. Product Supplied	Adj. Ref. Prod.	Unadj. Ref. Prod.	Diff.	Unadj. Product Supplied
Jan.	3,043	3,108	65	4,646	1,912	1,946	34	3,594
Feb.	2,888	2,945	57	4,869	1,792	1,822	30	3,625
Mar.	3,019	3,026	7	3,671	1,719	1,723	4	3,243
Apr.	2,945	2,978	32	3,048	1,639	1,656	17	2,524
May	3,066	3,093	27	3,025	1,586	1,600	14	2,517
Jun.	3,153	3,187	35	2,743	1,548	1,566	18	2,601
Jul.	3,305	3,344	38	2,601	1,575	1,594	20	2,471
Aug.	3,321	3,359	38	2,799	1,584	1,603	20	2,570
Sep.	3,354	3,306	– 48	2,599	1,627	1,602	– 25	2,584
Oct.	3,251	3,217	– 34	3,085	1,629	1,612	– 17	2,523
Nov.	3,239	3,200	– 39	3,208	1,736	1,716	– 20	2,795
Dec.	3,221	3,238	17	3,725	1,894	1,903	9	3,022
Average	3,152	3,169	16	3,327	1,687	1,695	8	2,834

1980

Month	Distillate Fuel Oil				Residual Fuel Oil			
	Adj. Ref. Prod.	Unadj. Ref. Prod.	Diff.	Unadj. Product Supplied	Adj. Ref. Prod.	Unadj. Ref. Prod.	Diff.	Unadj. Product Supplied
Jan.	3,013	3,093	80	3,794	1,771	1,812	41	3,108
Feb.	2,766	2,888	122	3,834	1,773	1,836	63	3,168
Mar.	2,557	2,690	133	3,312	1,584	1,652	68	2,726
Apr.	2,460	2,554	94	2,729	1,595	1,643	48	2,492
May	2,474	2,610	136	2,538	1,509	1,579	70	2,305
Jun.	2,646	2,721	75	2,392	1,575	1,613	38	2,359
Jul.	2,689	2,783	94	2,343	1,480	1,528	48	2,339
Aug.	2,461	2,582	121	2,258	1,444	1,506	62	2,348
Sep.	2,686	2,726	40	2,627	1,495	1,516	21	2,380
Oct.	2,589	2,650	61	2,981	1,512	1,543	31	2,258
Nov.	2,703	2,823	120	3,069	1,579	1,641	62	2,513
Dec.	2,891	3,052	161	3,776	1,660	1,743	83	2,762
Average	2,661	2,764	103	2,969	1,580	1,634	54	2,562

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